PRESENTATION OF THE ROYAL GOLD MEDAL

To Sir Frederic Leighton, Bart., P.R.A. [*H.A.*], Monday, 25th June 1894.

ADDRESS BY THE PRESIDENT, FRANCIS C. PENROSE, M.A., F.R.S., F.R.A.S.,

KNIGHT OF THE ORDER OF THE SAVIOUR IN GREECE.

Colleagues and Gentlemen,—

THIS evening we have before us a grateful task, and one in which I feel it to be a high privilege to take a share, in presenting, in the name of our Most Gracious Patron, Her Majesty the Queen, the Gold Medal to one who has greatly honoured us by accepting it at our recommendation. The distinguished President of the Royal Academy is well known to all of us here by his works and by his renown, to many by his friendship, and his genial courtesy to all who have had any intercourse with him.

As it is possible that someone who has not sufficiently followed the considerations which have guided the Institute in this award might ask, Why should a medal intended for the recognition of architectural merit be awarded to a painter? I propose addressing myself briefly to that point by-and-by; but, in the first place, I will endeavour to trace shortly some of the steps by which our distinguished friend has attained the highest eminence in our British world of Art.

Sir Frederic Leighton was born at Scarborough, and his natural inclination towards the graphic arts early declared itself. His father, a physician, though he had other views for his son—intending, it is said, to give him a University education, with a view to his ultimately being called to the Bar—nevertheless encouraged him to make himself acquainted with anatomy, and gave him every facility for the study of art in order that he might be equipped for the profession should he eventually follow it. We early find him, then, studying at Rome; and, if I may be allowed a moment's digression, this leads me to reflect that I must occasionally have fallen in with him during the winter and spring months at the Artists' excursion called the Cervara, or on the Pincio, or when it was the ambition of the British art students who were there to fall in with John Gibson at his early coffee at the Lepre.

Dr. Leighton became so far a convert to his son's wishes as to consent that the latter's drawings should be submitted to the famous American, Hiram Power—a man not less remarkable for his great skill as a sculptor and his knowledge of art, than for his noble physique, his courteous manners, and his sterling character—and if he decided that there was the true artist's ring about these works, his son should no longer be opposed in following the bent of his inclination. We may, I think, appreciate the pleasure which the good American had in assuring the father that there could be no doubt whatever on the subject. The pithy way in which old Hiram Power gave his verdict is worth recording: "Then you think," said Dr. Leighton, "I ought to let my son be an artist?" to which there came the answer: "You have no choice, sir; Nature has done that already." After this, the youthful painter studied in various European centres, and made himself proficient,

not only in the art of the countries in which he sojourned, but also in the languages, as those who have heard him discoursing with foreigners can testify. At Brussels, when eighteen years of age, he produced his first finished picture, "Cimabue finding Giotto in the "Fields." He shortly afterwards showed his sympathy with our profession by a painting of which the subject was the death of Brunellesco. After some residence in Paris, working at the Louvre, he studied at Frankfort under the painter Steinle, to whom he submitted the design of his magnificent picture "The Triumph of Cimabue," which he carried out at Rome. I have heard that during this period Thackeray fell in with him, and prophesied that, although as yet altogether unknown in England, he would become President of the Royal Academy.

The great picture above referred to was sent to England for the Exhibition of 1855, then held in the rooms of the present National Gallery. The seniors here present can remember, and many of the juniors who saw the picture when it was exhibited again at Manchester can well understand, the fervour which was created on all sides by the unexpected appearance of such a work by a man hitherto unknown. The picture was immediately bought by the Queen. But, for the present renouncing what might have seemed a lucrative opportunity for accepting work in London, he returned to his studies, and resided for some years on the Continent, chiefly in Paris, in communication with some of the most distinguished painters of that capital.

Soon after his return to England, he painted the fine fresco representing "The Five Foolish "Virgins," in the church at Lyndhurst, in the New Forest: and in the same material, but more recently, two large fresco paintings at the South Kensington Museum, representing the Industrial Arts applied to Peace and War.

It is, however, impossible, in the space here available, to enumerate anything like a list even of his principal paintings. "The Power of Music" was exhibited in 1856. The great classical subject of "Hercules Wrestling with Death for the Body of Alcestis" must be specially mentioned, for it called forth the praise of his friend Browning in the poem called "Balaustion's Adventure":—

> I know, too, a great Kaunian painter, strong
> As Herakles, though rosy with a robe
> Of grace that softens down the sinewy strength,
> And he has made a picture of it all.

More lately we have seen the fine, pathetic picture of Andromache, *dejectam conjuge tanto*, in her captivity. In 1881 the merited compliment was paid him in the request from Italy that he should contribute his portrait to the gallery of distinguished painters in the Uffizi at Florence.*

Thus far we have followed his career as a painter; but, not content with the triumphs of his brush, he has invaded the sculptor's domain. In 1877 we admired the fine group of the "Athlete struggling with a Python," and in 1886 his bronze statue of "The Sluggard." I shall presently have to speak of his potential claim to graduate in architecture.

I necessarily omit much. Of him it can without exaggeration be said, *Nihil tetigit quod non ornavit*. Up to 1883 he had for many years, as their Colonel, led the Artists' Corps of Volunteers. His eloquence in presiding at the Royal Academy Dinners is the theme of all.

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* The dates of the principal steps of Sir Frederic Leighton's advancement are these:—Associate of the Royal Academy, 1864; Royal Academician, 1869; President, 1878. In the last-named year he was knighted, and in 1886 created a baronet. In France he is an Associé Étranger of the Institut (Académie des Beaux-Arts) and a Commander of the Légion d'Honneur. In Germany the rare distinction of Frederick the Great's "Ordre pour le "Mérite" has been conferred on him—an honour accorded to very few.

The social side of his character is equally admirable, and many are those who can bear witness to generous actions on his part, both in purse and kind sympathy.

I do not suppose there is anyone in this room who questions that the Institute has been thoroughly right in making the award of this medal which we have the happiness of bringing to its consummation to-night; but, as I said before, in case there should somewhere be a doubter, I will make a few remarks on that head. Had Sir Frederic Leighton no other claims upon us than the noble architectonic works that have often been products of his hand, works, many of them in oil and fresco, executed for the embellishment of public and private buildings, the Institute would have a perfectly good answer to give. The late Prince Consort thus defined the ruling principle—namely, that the appropriation of the Gold Medal should be left an open question to be raised according to circumstances in each year, and to be applied as the Council might periodically feel to be the best for the general interests of the profession. The Institute would therefore be justified in awarding the medal to an artist of high distinction either as a painter or sculptor. But Sir Frederic Leighton is very much more than a painter. He is the only President of the Royal Academy, from the time of its first foundation, of whom it can with certainty be said that he has evinced a thorough knowledge of all the great Arts, and who is practically great as a painter, a sculptor, an orator, and a writer.

The greatest master in Art since the days of Pericles is reported to have said, "I know "but of one Art." There have been but few who could justly adopt those words, but one of those few is Sir Frederic Leighton. Similar to its tripartite analogy in Nature, where length, breadth, and thickness form one space, so architecture, sculpture, and painting are one in Art; the practice is different, but the principles, whenever excellence is touched, are found to be the same in each branch. You know Sir Frederic Leighton's high achievement in sculpture. In architecture there is the clearest evidence of what I have called his potential merit had he had occasion to practise in our special branch.

In biennial Addresses to the Students of the Royal Academy, particularly in the years 1889, 1891, and 1893, we find criticism of the highest value clothed in beautiful language on the Spanish, French, and German Schools of Mediæval Architecture. Not mere sketches and generalisations, but dealing with the subject in an exhaustive manner. Our ex-President has most happily and justly eulogised these addresses, saying in his discourse to students at the beginning of this year that they demonstrate in regard to architecture that their writer "possesses an intelligent and a critical grasp of the subject second to no modern author. To "few indeed is it given to combine with wide historical research and keen critical acumen the "indescribable charm of composing poetry in prose. Let me commend to your thoughtful "attention the study of these singularly learned and graceful discourses."

That an artist of such refinement would also be in sympathy with the spirit of classical architecture will not be doubted. I had myself frequent opportunities of bearing witness to his appreciation of the elements of beauty in the works of the Greeks at meetings of the Publication Committee of the Society of Dilettanti; but I wish particularly to call your attention to the masterly summaries of the characteristics of Mediæval architecture as practised by the leading races of Continental Europe in the Academy lectures before referred to. The whole series is full of practical teaching in clear and incisive language; but, as in this address limitation is necessary, I will confine myself almost entirely to what is said on the evolution of Gothic architecture from its source at Saint-Denis. After a short discussion of the earlier manner of vaulting from the Roman type, in which stability for the waggon vault was sought in the resistance of solid masses of brick and concrete work, we read:—

"The substitution of the principle of a balance of active forces to this principle of inert

"resistance is probably the greatest revolution ever introduced in the science of building; "we have here the generative principle of Gothic architecture, its essence and its life. How "this revolution was brought about I can of course only indicate to you in summary outline. "Let us first note in passing that the presence of a pointed arch, except as a structural form, "does not constitute Gothic architecture. Isolated radiating pointed arches have been built "in ages and countries in which the Gothic style was not dreamt of; a building might be "Gothic in structure and principle without showing a pointed opening anywhere; it is through "the roof, not through the window, that the formative Gothic idea entered."

Then, after describing various expedients for securing stability, including the important step taken at Vezelay, where intersecting vaults, but without ribs, were substituted for the continuous waggon-head—an advance, but not yet satisfactory—we read: "A few years later, "in the early middle of the twelfth century, a Benedictine monk, feeble of frame, but of a lofty "spirit, Suger, the great Abbot of Saint-Denis—who has on sculptors, by the bye, this special "claim, that he boldly withstood the bitter denunciations launched by St. Bernard against the "sculptural decoration of churches—began the erection of a church in which the tentative "gropings, at which I have just hinted, gave place to the systematic and logical application "of a new and fruitful conception—the idea of stability based on the balance of active forces, "expressed in a self-sustaining combination of upright supports and vaulting ribs, with "detached buttresses bringing their action to bear exactly on the points at which the thrust of "the vaults is gathered up."

The address concludes: "Is there any lesson that we may draw from this hurried "survey of artistic evolution among the French? I have dwelt with emphasis on the genius "of their Mediæval builders; do I advocate—the young architects for whom I have mainly "spoken to-night may ask—do I advocate the adoption of Gothic forms for the purposes of "our own lives? I have spoken to little effect if my answer can be doubtful. Artistic "forms are the vesture of ideas and the expression of mental conditions; the ideas and "mental conditions of our day are widely removed from those of the Middle Ages; the modern "mind cannot with fitness put on the garb which was moulded on the mind of a day long past. "But if we may not fitly adopt those forms, we cannot too reverently note the spirit which "presided over their development, for a like spirit brought to bear on other material and "under other conditions may yet bear new and noble fruit. And the characteristics of that "spirit are—a masculine independence, a tenacious grasp of central principles, a fearless "sincerity in expression, a scorn of shams, and trust on truth."

In Sir Frederic's address for last year we find admirable criticisms on the German Mediæval architecture; praise where due is given to the German Romanesque, and afterwards the reflection, which appears to me perfectly just, that the Germans as a race were never in unison with Ogival architecture; and in respect to their great achievement—Cologne Cathedral—though not withholding praise, he observes, as I think most truly: "We feel that we are in "the presence and under the spell of a powerful will, grasping serenely and solving with "unfailing and intellectual resource a scientific problem; we bow accordingly before a "triumph of skill and volition; we are not, as it seems to me, thrilled by the kindling touch of "genius."

To the pictorial works by Sir Frederic Leighton in connection with architecture already named may be added paintings for the ceilings of a house at New York, of which our Gold Medallist, Mr. Richard M. Hunt, was architect, as well as several of the same character in London. But I must specially mention one work combining architecture in the solid with which he has had much to do. I allude to the removal of Alfred Stevens's monument from the south chapel in St. Paul's to the nave for which it was originally designed, which was

done entirely under his inspiration and in no small degree at his expense. I feel sure that there can be no need for me to dilate further on what seems to require no argument in justification of the action of our ex-President and of the Council, and of the Institute which has ratified their action in awarding this medal, especially when, to the great advantage of the Institute, Sir Frederic Leighton's acceptance of it sheds lustre on the roll of Gold Medallists, so well begun with the loved and honoured name of Professor Cockerell; and it must be obvious to all of us that the whole profession gains from the fact that the chief representative of Art in its three branches in this country thereby shows how much he is in sympathy with Architecture.

FRANCIS C. PENROSE.

SIR FREDERIC LEIGHTON'S REPLY.

MR. PRESIDENT,—

FELLOWS and Associates of the Royal Institute of British Architects, how deep, how warm, is my sense of the great honour I have just received at your hands—an honour which you have said, Sir, is conferred, for the first time in the annals of the Institute, on a painter—I need hardly tell you. Neither need I say how much of grace has been added to this distinction by the terms in which my old and honoured friend, your eminent President, has sought, with generous indulgence, to justify before his hearers the exceptional character of this award. I am touched, Sir, by those words, and by the cordial reception with which they have been met; but none the less am I embarrassed in the consciousness of the exiguity, on the most favourable estimate, of my services to the ancient and noble craft to the furtherance of which this institution ministers.

So much may perhaps be said, that enthusiasm and sympathy are contagious, and that he renders in his small degree some service to Art who contributes by word, if not by deed, to the spreading of that atmosphere of favouring interest in which every creative effort best thrives and prospers. And, assuredly, in reverent enthusiasm for the Art which has clothed in stone and marble so much of sublime inspiration, and has invested Use which is its moving cause, with so much of Beauty which is its eloquence, none sits among you to whom I yield vantage or precedence. But since a painter—and, if I may, without immodesty, assume for the nonce that other honourable title, a sculptor—has been made the recipient of your highest favour, you will perhaps bear with me whilst, in a few words, I profess my faith on the relationship of the Arts one to another—a subject on which very divergent opinions are often expressed, and in regard to which it seems to me a certain confusion of thought sometimes obtains.

This, indeed, none deny: that the co-operation of the Arts has given to the world some of its choicest masterpieces; that though the House of the Virgin Goddess at Athens would have been indeed a supreme work in its balanced strength and subtlety without the added majesty of the Phidian sculptures, nevertheless the collaboration of Phidias and Ictinus has enhanced infinitely the dignity of that perfect edifice; or that the purple radiance of the lights of Chartres Cathedral, and the sombre gleam of the mosaics of St. Mark's of Venice, have greatly heightened the poetry and appeal of those two famous structures. Neither is it open to challenge, that great advantage must accrue to the followers of each of these arts from a knowledge of and sympathetic insight into the nature of the other two, and by a living perception of the fundamental affinities which unite them. On the other hand, the fruitfulness of solidarity (if I may use an un-English word) between them has led, I think, to no little misapprehension as to the true character of their relationship. In sight of the magnificent results of their union; in sight of the fact that the graphic arts have so often furnished the crowning adornment of the builder's work, adorning it as the flower adorns the

tree; in sight also of the high signification of architecture, a significance which I fear is not always sufficiently remembered, as expressing in its works the temper and spirit of nations and of epochs—in sight of these things, I say, some have been led, or misled, into assuming that the only fit and proper function for the graphic arts is to enhance and adorn the works of the architect; that architecture, therefore, is in a manner the generating master-art to which the others are but ancillary and subordinate. I am aware that I am treading delicate ground here; but even in your midst I must affirm this assumption, and its corollary the subordination of painting and sculpture, to be a shortsighted fallacy, revealing but a scant apprehension of the character of that house of many mansions—the House of Art. Sir, even in the face of Architecture arts of which the theme is Man and the myriad-mooded aspects of the outer world stand erect and unabashed; even among the children of Ictinus, and of Robert de Luzarches, of Brunellesco, and of Wren, the sons of Phidias, of Michelangelo, and of Donatello, the disciples of Raphael, of Titian, of Rembrandt, and of Reynolds decline to strike or vail their colours. In remote mediæval times, Sir, when the building was the book, the open volume in which alone could be read by an unlettered people the truths of Faith, and that little which was then the sum of human knowledge—in days before the printing press had shorn architecture of half its phonetic function—some such contention on its behalf was no doubt tenable. But in more modern days great changes have come over Art, and notably over painting, which, without abdicating for a moment its severer and more restrained function in connection with architecture, or its more monumental and idealistic developments, has explored and occupied whole regions of new emotional and imaginative suggestion; the realm of mysterious and alluring glooms wherein Rembrandt is king, and all the witching range of the fugitive and fitful lights which flit and flame and faint across the fair face of the land, and of the sea in which Turner conjures without a peer. In these its phases the painter's art is self-centred and unbeholden.

But whilst in days in which narrow isolation is repudiated by Architecture some of her sons invite the sister arts to what is but a gilded vassalage, we see, on the other hand, less seldom than I could wish, a tendency to fly to an opposite extreme—a tendency to instal the picturesque in a position of perilous pre-eminence; to forget that in this masculine builder's art every portion of every work should form part of an organic, logically developed whole, springing from and grafted on material, conditioning requirements scientifically grasped—a tendency to work from the surface, and even, in extreme cases, to mistake for the exercise of a virile and logical art a mere sprinkling of ornament, broadcast and haphazard, over a perhaps confused and incoherent structure.

It has happened to me, Sir, and more than once, to be asked by earnest and gifted students to express my views on architecture from the painter's point of view. Now, my answer has invariably been, and ever must be, that I acknowledge in architecture no painter's point of view. Architecture, being an art of which the conditions are unique as well as imperative, recognises no determining artistic motives outside itself. These conditions are, I repeat, the rigorous fulfilment in each case of the demands of a dictated problem of Utility, resulting in a structure stamped with the expression of its functions, lit up and ennobled throughout by the spirit of Beauty. I say "throughout," for that spirit must leaven it from its birth, and the signs of it should grow and blossom with it, and not be flung over it as a superfluous garment or an adventitious gawd. The beauty of a truly noble building should be, indeed, as the inner soul breathing out of it and made manifest, not as a fair mask to be assumed or laid aside at will; and these results will be achieved by those to whom the gift is given, through the strengthening within them of the æsthetic sense, so that it may flow out on to and permeate the work from the outset, and use and decorum may thus walk hand in hand

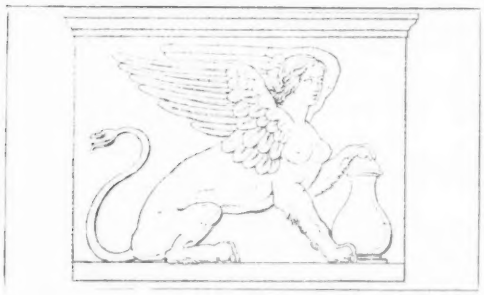
to their mutual enhancement. Now this sharpened sense of beauty—I use the word in its widest sense—is the stamp and hall-mark of the artist, whether he build, carve, or paint; and as the labours of the painter and the sculptor are in their nature untrammelled by considerations of the useful and the necessary, intercourse with the followers of the purely graphic arts is of great profit and strengthening to those whose paths are less free and their shackles more numerous.

But whilst Architecture may gain, from intercourse with the other arts, a heightened charm, a warmer, richer, and more supple life, how great is the service that she, in her turn, if rightly consulted, may confer on the other arts! For where better than in her best and purest works can the painter and the sculptor learn the great and needed lessons of wise restraint, of noble reticence, of strength controlled, and of ornament made doubly precious by sober use? Of a truth, Gentlemen, these three arts may draw ever-increasing strength and power from closer communion of spirit among their several votaries; and it is as a symbol of that growing communion that even those who may least deem me worthy of it may yet, I think, welcome the honour for which I have risen to express my warm, my respectful, and most unfeigned thanks. FRED. LEIGHTON.

THE SOCIÉTÉ CENTRALE DES ARCHITECTES FRANÇAIS.

A COMPLIMENT TO BRITISH ARCHITECTS.

THE architects of France, who have recently held their annual Conference, varied their ordinary bill of fare this year by a visit to Lyon, where, among other business, they assisted, on the 12th inst., at a professional banquet, having on the way thither inaugurated their approach by a déjeûner at the Hôtel de la Cloche, Dijon, on the 10th inst., under the Chairmanship of M. Guadet, Member of the Institut de France. The banquet at Lyon brought together 170 *convives*, and M. Daumet, Member of the Institut de France, President of the Central Society of French Architects [*Hon. Corr. M.*], worthily took his seat at their head. This festivity was followed, in due course, by a dinner at Bourg, at which the President of the Society also presided; and on the 16th inst., in Paris, the Hôtel Continental became the scene of a very brilliant entertainment, following the distribution of prizes and marking the end of the Conference. About 140 *convives* took part in the banquet, which was presided over by M. Ch. Yriarte, representing the Minister of Public Instruction and the Fine Arts, and M. Daumet, the President of the Society—the latter taking the Chairman's duties. M. Daumet, having proposed the health of President Carnot—"si bienveillant pour les artistes"—the health, also, of the Minister of Public Instruction, of the Director of Civil Buildings, and of the Director of Fine Arts, and having read a telegram from "nos confrères Russes," who sent their best wishes, proceeded to toast another body of foreigners with whom, he said, the French Society held relations of veritable friendship—viz. the Royal Institute of British Architects. His words, most happily chosen and most complimentary to the Institute, concluding an excellent speech, are given in *L'Architecture*, 23rd inst.; and they were referred to by Mr. Charles Barry in the speech he made on Monday, 25th inst., when seconding the vote of condolence [p. 571] with the French architects in that terrible calamity which has aroused the indignation not of France alone but of the whole world. The programme of the Conference, which was given in the issue of *L'Architecture*, 12th ult., comprised Papers and Discussions on Education in the Provinces, Property in Works of Architecture, Departmental Councils of Civil Buildings, &c., varied by excursions, and visits to old buildings, as well as to the Exposition Universelle at Lyon.



CHRONICLE.

The London Streets and Buildings Bill.

The Select Committee in charge of the Bill, which had been holding three sittings a week latterly instead of two as originally arranged, adjourned on Tuesday the 19th to Tuesday the 26th inst. In the interval the Bill as amended in Committee was reprinted, incorporating therein further amendments made by the promoters but remaining to be considered by the Committee. Among the latter are the extensive modifications on the original made in Part IV., which nevertheless is printed in the same form and manner as are Parts I., II., and III., which, so far as the Committee are concerned, may be considered as practically settled. No memorandum or explanatory statement is issued with the reprint, and the difficulty of appreciating its present form is not diminished by the fact that the numbering of the clauses has been altered. For instance, clause 136 of the draft Bill appears as clause 151 in the reprint, and this occurs throughout the Bill. Consequently, to any one who has not faithfully followed the proceedings before the Committee, and carefully noted what has been done, the reprint is confusing and useless. Indeed, it is impossible in general terms to give an idea of the actual position of the proposed legislation. It is satisfactory to note, however, that the views of the Select Committee generally have not been in favour of the excessive powers sought by the London County Council; that almost all of the objectionable proposals, so far as they have been dealt with, have been eliminated; and that the Bill is greatly improved by the amendments adopted.

At the sitting of Tuesday, the 26th inst., the consideration of the amendment proposing to remove the obligation to carry up the party-walls of domestic buildings above the roofs was resumed. Mr. F. W. Porter, Surveyor to the Sun Fire Office, Mr. Jackson, Assistant Secretary to the Royal Insurance Office, and Sir Eyre Massey Shaw gave evidence in support of the present legislation requiring the party-walls to be carried up above the roofs. In support of the amendment Mr. John Willis, Superintendent of the Liverpool Fire Brigade, gave evidence as to the practice of building in Liverpool and surrounding districts, where continuous roofs were common. Mr. Littleton supported the amendment, contending that the carrying up of party-walls through the roofs of domestic buildings was neither necessary nor desirable; but after much discussion the Committee decided that the clause should stand as drawn, maintaining the existing law. The amendment was therefore lost.

Another important matter dealt with was Clause 151, By-laws, which was much improved by further amendments beyond those introduced by the London County Council in the reprinted Bill.

The constitution of the Tribunal of Appeal has now been settled thus in Clause 163:—One member to be appointed by a Secretary of State, one by the Council of the Royal Institute of British Architects, and one by the Council of the Surveyors' Institution, thus establishing a Tribunal of three instead of the five proposed by the London County Council. Provision is also made for the filling of any vacancy, temporary or permanent; and generally the clauses relating to the Tribunal, Nos. 163 to 175, have been materially improved.

The Committee sit again on Thursday the 28th, and Friday the 29th, to proceed with the remaining clauses and with Part IV., after which the Definitions and Schedules will be considered. A copy of the reprint of the Bill is in the Library.

The Chair of Architecture, Liverpool.

The Council of University College, Liverpool, having approved the scheme formulated by the Technical Instruction Committee on the Proposed School of Architecture at Liverpool, have decided to connect the Roscoe Professorship of Art with a central scheme for art instruction in that city, and allot to it the income from the endowment of the Roscoe Chair; and, further, to provide suitable accommodation for the Professor of Architecture and the classes in that subject. The Managing Board consists of sixteen members, among whom are two representatives of the Liverpool Architectural Society (one to be the President for the time being) and one respectively of the Liverpool Academy of Fine Arts, the Liverpool Master-Builders' Association, and the Building Trades' Federation. The Council of the University now invite applications for the Professorship, the fixed endowment of which is £375 per annum, with share of fees from students and other emoluments. The Professor is to conduct Architectural classes at the College, and to act as Director upon the Managing Board. In respect of the present appointment it is understood that the Professor will be permitted to undertake such professional practice only as will not interfere with the discharge of the duties of his Chair. The appointment is for five years, and the Professor will be eligible for re-election. Applications must be lodged with the Registrar of the College on or before the 25th prox. It is to be hoped that

the College will secure the services of an accomplished and able Professor, who will give effect to their evident desire to advance the cause of architectural education.

The Godwin Bursary Report, 1893.

Mr. Banister F. Fletcher's Report as Holder of the Godwin Bursary * for 1893 has already been alluded to in these pages in terms of commendation, and the more critical perusal rendered necessary for the purpose of the slight *résumé* attempted below has only served to confirm the opinion previously expressed. Mr. Fletcher is to be congratulated on the excellent use he made of the unique opportunities afforded by the Columbian Exposition of Chicago,† for rarely can it fall to the lot of a student to range a field so prolific in examples of the particular subjects for the study of which the Bursary was instituted. On all matters connected with the architecture represented in the designedly ephemeral structures at the Exposition the Report may be consulted in the confident expectation of finding within its pages the information sought.

Section I. briefly recounts the preliminaries in regard to the question of site, and the composition and functions of the Commission appointed to carry out the general arrangements of the Exhibition, and goes on to tell how the boundless marshy waste chosen for the site, consisting of a succession of low sand dunes situate on the shore of an inland sea, was turned to the best and most effective use by the eminent "landscape architect," Mr. Olmstead, to whom was entrusted the laying-out of the grounds. In an interview with Mr. Olmstead the author gained much information about this part of the undertaking, which is duly retailed in the Report.

The question of procuring designs for the great buildings was a problem not a little difficult of solution, and many and various were the suggestions offered. At length a Council of Architects was decided upon, who, sinking personal idiosyncrasies, agreed to work together for the benefit of the whole scheme. It was fortunate, remarks the author, that at the head of this Council was placed by mutual consent Mr. Richard Morris Hunt (*Royal Gold Medallist* 1893), who is looked up to as the Nestor of the architectural profession in the States, and who exercised a controlling influence over the other members of the Council; and more fortunate still that the architects of the buildings surrounding the great court were all pupils or direct followers of Mr. Hunt. Mr. Post and Mr. Van Brunt were pupils; Messrs. Howe, Peabody, and Stearns had been pupils of Mr. Van Brunt; and Mr. McKim, by his training at the École-des-Beaux-Arts, was of the same school of thought and design. Harmony was thus assured, with a result the more satisfactory to architects because it led to what was practically an exhibition of architecture. True, the expression of American life in the art was not to be found, but this can be forgiven in face of the object-lesson afforded of the accepted canons of architectural art with respect to proportion, and its union with sculpture and painting, and those points which are apt to be overlooked in a new country. Nevertheless, the reproduction of these great classic designs all over the country for town-halls, museums, and the like is strongly deprecated; it is sufficient that American architects, who are already advancing so rapidly along certain new lines of departure, should profit by the lessons such designs teach, without slavishly copying the forms. Otherwise a great "classic revival" will result, and stay for a prolonged period the true progress of art in America. Section I. concludes with a tabular statement showing the extent of area covered, and statistics as to the number of exhibitors, attendance, receipts, cost, &c., of all the principal exhibitions since that held in London in 1851.

Section II., The Greater Buildings, commences with a list of the principal buildings, and gives the area occupied, cost, dimensions, and names of the architects who designed and superintended their construction. The largest of all, the Manufactures Building, measured 1,687 by 787 feet, and cost £200,000; the most expensive, costing £240,000 with the annexe, being the Machinery Hall, the dimensions of which were 846 by 492 feet. Taking the buildings in their order of importance, Mr. Fletcher proceeds, with the aid of photographs, illustrations from American periodicals, and a large number of sketches and measured drawings of great excellence from his own hand, to describe them in considerable detail, treating of the general scheme of plan and ornament, the methods of construction and materials employed, and calling attention to the more prominent characteristics, both as to construction and design. A few features common to all the buildings may usefully be noted.

The enclosing walls were built of a framework

* The Godwin Bursary, consisting of a Silver Medal and £40, was founded for the promotion of the study of works of Modern Architecture Abroad, and is awarded to any member of the profession who shall submit the best selection of practical working drawings, or other evidence of special practical knowledge, and testimonials. The holder of the Bursary is required to spend not less than five weeks abroad (in Europe or America), to study, examine, and report on some of the best specimens of modern planning and modes of construction, drainage, water-supply, ventilation, and other sanitary arrangements to be found in the place he undertakes to visit. Within a given time he must furnish the Council with an illustrated memoir descriptive of the same.

† Mr. Fletcher left England for New York on the 17th May 1893, and visited Brooklyn, Philadelphia, Baltimore, Washington, Chicago (where he spent five weeks), Niagara, Montreal, Boston, and back to New York, returning to England in the middle of August.

of wood, properly braced, and sheathed on front and back with boarding laid diagonally, to which was fixed the exterior facing of "staff"—a material the composition and mode of preparation of which are given in the Report. All the statuary and ornamentation, such as caps, pilasters, &c., were formed of this material, which can be sawn, planed, and tongued like wood, and if painted, and the weather kept from penetrating behind the face, will last, it is said, as long as wood. Mr. Fletcher gives as well the recipe for making the paint used on the exterior of the buildings. This consists of varying proportions of rice-flour, bicarbonate of soda, linseed oil, water, and table salt; and besides being considerably cheaper is much more satisfactory than ordinary oil-paint for brick, cement, or plaster.

The foundations of the buildings were constructed entirely of plank. The load on the soil for spread foundations was 2,500 lbs. per square foot, and a maximum load of fifteen tons per pile where piling was used. As the soil was almost entirely sand, and the subsoil either clay or sand, the spread foundations were put right on top of the sand. The main floors of all the buildings, except the Machinery Hall and the Mines Building, were figured for 200 lbs. per square foot. The Machinery Hall was figured for 250 lbs., and the Mines Building for 150 lbs. The galleries were figured for 80 lbs. per square foot, except those used for restaurants, which were figured for 100 lbs. The roof trusses were figured for 40 lbs. per horizontal foot, or 25 lbs. vertical load and 30 lbs. wind pressure. Purlins and jack rafters were figured for 30 lbs. per horizontal foot. The unit and fibre strains were as follows:—

Tension: steel 20,000 lbs., iron 14,000 lbs. per square inch.

Compression: steel 15,000 lbs., iron 10,000 lbs. (reduced by formulæ) per square inch.

25,000 lbs. fibre strain was allowed in steel pins, and 20,000 lbs. in iron pins.

Steel pins, bearing, 20,000 lbs., iron 15,000 lbs.

Steel rivets, 20,000 lbs. bearing, 10,000 lbs. shear.

Iron rivets, 15,000 lbs. bearing, 7,500 lbs. shear.

Wood, fibre strain, white pine, 1,200 lbs. maximum.

Bearing perpendicular to fibre, 300 lbs.; shear with grain 100 lbs.; maximum bearing at end of timber 800 lbs.; tension 800 lbs. to 1,000 lbs.

The wooden framework was a novel construction never before attempted on so large a scale; and it is interesting to note the methods employed to keep within the architectural lines of the design all the constructive necessities. The upright posts as a rule were 6 inches by 6 inches, braced with cross-bracing and nailed with round nails of great holding power, put up without any framing out of stock sizes of lumber. Stock sizes were used so that the framework might be sold as salvage at the close of the Exhibition. This box construction was then sheathed with rough boarding laid diagonally, and the "staff" nailed to the sheathing. Where extra strength was required the framing was double sheathed, on the inside as well as the outside, the sheathing being reversed for extra strength. In the case of height exceeding a certain length, horizontal ties were added, and from this platform the framing started afresh. The sheathing was well nailed to each stud-post, and at least one half of the boards were continuous over plate, and everywhere broke joint. Plates 30 feet long or under were made in pieces in one length, plates over that length being formed of two or three pieces breaking joint, at least 10 feet apart, spiked with ten spikes per running foot. Sheathing on all plates was on two sides diagonally in opposite directions nailed with ten nails per running foot. Rain-water pipes were of corrugated iron.

From an architectural point of view the Agricultural Building was the finest, owing to the union of architecture with painting and sculpture. The latter was most unsparingly applied, and might be considered almost a dream in "staff," presenting a composition which, owing to the expense, it would be impossible to render in any lasting material.

From a constructional point of view, the steel cantilever trusses of the great nave and aisles of the Mines Building by Mr. S. S. Beman were exceedingly interesting and novel. The central space to be roofed was 630 feet long and 230 feet wide, with an extreme height of 100 feet at the centre, and 47 feet at the sides. Steel cantilever roof trusses, supported on steel stancheons, were placed 64 feet 5½ inches apart longitudinally, with a span of 115 feet, and aisles on either side of 57 feet 6 inches span. The total area, therefore, of 630 feet by 230 feet was carried on sixteen supporting stanchions.

As a colour scheme the Transportation Building was probably more important than any erected in recent years, from the simple fact that it was designed from the commencement for colour treatment. Mr. Sullivan, one of the architects responsible for the building, is an enthusiastic botanist, and all his system of sculptured as well as colour work is derived from a study of practical botany.

The method of designing the sculpture on the Fisheries Building is interesting. A full-size drawing was first made of old Romanesque capitals, and this was taken to the sculptor's studio, and there worked over with representations of animals real or mythological, such as frogs, reptiles, various kinds of fish, dolphins, &c. The outline of the old cap was retained, and the detail filled in with various things connected with the sea. A variety of caps was thus produced, which could be easily cast in "staff" and duplicated throughout the building.

Section III. The States Buildings.—The pages comprising this section are devoted to the more

important buildings erected at the expense of the different States of the Union. In regard to methods of construction there was nothing very novel to report, and in general the buildings were treated without any regard to each other or to grouping, their design being determined by associations connected with the founding and historical development of each State, thus affording opportunity of introducing many interesting features. Many of the buildings ranked highly as designs, and all were interesting as illustrative of the manners and resources of the various States, and the enormous and varied wealth of the country in building materials.

Section IV. The Constructive Exhibits.—In this section a short account is given of the more noteworthy exhibits connected with methods of construction, and of materials such as building stones, bricks, tiles, &c. The fireproof partition walls formed of hollow tiles varying in thickness from two to six inches, now so general in the States, are a great improvement on the old 6-inch lath-and-plaster partitions ordinarily used in England. The skin of the tiles is half an inch in thickness, and is left rough on the face for receiving the plaster. The tiles are laid one over the other to break joint, and are further secured longitudinally by iron clips, wood bricks being set in the vertical and horizontal joints to afford nailing surface for the architraves, wainscoting, &c. The hollow tiles allow the introduction of flues for ventilating, heating, &c., and gas and water-pipes, electric wires, &c. Outer walls are also constructed of these tiles.

Steel is used largely for constructive purposes, and some novel exhibits were shown in the way of steel roofing and steel ceilings and wainscoting. The roofing is prepared in sheets and painted with graphite paint. It costs 14*s.* per hundred square feet, and 20*s.* for laying. The thin plates of steel used for ceilings are designed to supersede ordinary plaster ceilings; they can be pressed out to any pattern, and it is claimed for them that they are fire- and water-proof, permanent, will not shrink, burn, warp, crack, or fall like plaster. They can be applied over old plaster ceilings. For rough wear in large halls or schools the steel wainscoting would be of service. The Ransome concrete inventions formed an important exhibit; they are applicable to various constructions, especially for floors and foundations, allowing of the distribution of a great weight over a large area without sacrifice of height. An explanation of the principles which guided the inventor is given in the Report.

Section V. The Sanitary Exhibits.—The various forms of drain traps and w.-c. apparatus exhibited are described in this section, and attention drawn to anything novel in their application. The ambitious scheme formulated for the Hygiene and Sanitation Bureau by Dr. Brewer, the Superintendent of this department, unfortunately fell through from want of support by the Exhibition authorities; hence the opportunity was lost of making the department, what it might and should have been, the most complete of its kind. Dr. Brewer's original proposals were for a most comprehensive scheme, the details of which are set out in a prospectus inserted in the Report.

Section VI. Heating and Ventilation.—Some interesting and useful notes are given in this section culled from a pamphlet on the Heating and Ventilation of Residences, by Mr. James R. Willett, being an Address delivered by him to the Engineering Society of the Illinois University. The work has since been presented to the Library by Mr. Fletcher, who states that the information contained therein, based as it is upon the practical experience of a practising architect, will be found very useful. With regard to the methods of ventilation adopted in the States, the disc fans seem to be most favoured, and it is surprising they should be so little known in England. Several kinds were exhibited, the chief advantages consisting in the quantity of air set in motion, the small power required to work the apparatus, the adjustability of the blades, its easy removal to any part of the room, and its noiselessness.

Section VII. The Institute of Building Arts.—This is a permanent exhibition in the city of Chicago of every class of building materials, systematically arranged, and under the care of a responsible curator. The institution is under the control of the Illinois chapter of the Institute of Architects, and bears the same relation to the constructive arts generally as the Parkes Museum does to sanitation and hygiene. Anything new in methods of construction or materials is here exhibited, with incalculable advantage to architect, client, and builder, who may compare and select at will. Such an institution, suggests Mr. Fletcher, started under the auspices of the R.I.B.A., under the control, say, of the Practice Committee, would be of the greatest service to the profession in England. Under proper management and under one roof all new methods could be judged by periodical visits, saving much time and trouble in single investigations. The income of the institution under notice is derived from a nominal annual charge for exhibit space, amounting to five dollars per superficial foot per annum. The institution is free to the public, and information given gratuitously; materials are tested free of charge, and lectures delivered on special subjects connected with the exhibition. That the institution is popular may be judged from the fact that it is visited on an average by over 1,500 persons monthly.

Sections VIII., IX., X. Specifications and Contract Drawings of Buildings.—Through the courtesy of Mr. D. H. Burnham, the Chief of Construction to the Exhibition, Mr. Fletcher was able to include in his Report a selection of the

specifications prepared for the erection or completion of the various portions of different buildings in the grounds. The selection comprises all or most of the trades engaged on the buildings. Mr. Fletcher observes upon the great value of these documents, especially in connection with Sections IX. and X., which comprise the majority of the original contract drawings and ironwork details of the several buildings. These drawings are bound up separately in four volumes, Book I. consisting of those for the Manufactures and Liberal Arts Building; Book II., for the Electricity, Transportation, Fisheries, and Women's Buildings; Book III., for the Administration, Machinery, Agricultural, and Mines and Mining Buildings; and Book IV. of Ironwork drawings of roofs of the Administration, Machinery, Manufactures and Liberal Arts, Electricity, Mining, and Horticultural Buildings. All the drawings are deposited in the Library, where also the Report in its entirety may be consulted.*

The late W. Calder Marshall, R.A. [*H.A.*].

William Calder Marshall, R.A. [*H.A.*], who died on Saturday, the 16th inst., at the age of eighty-one, had been an Honorary Associate of the Institute since 1878. The following memoir is kindly contributed by his son, Mr. Charles J. Marshall [*A.*].

My father was born in Edinburgh, 18th March 1813, and from his youngest childhood was devoted to modelling, making figures in clay when quite a little child. The earliest work of his which exists is a bas-relief of his sister, made when he was a very little boy, the only tool employed being a teaspoon.

From 1822 to 1826 he was educated at the High School of Edinburgh, and afterwards attended classes under Professors Pillans, Jamieson, Leslie, &c. For one session he studied drawing at the Edinburgh Academy, and entered the Trustees' Academy in 1830, which he attended until he became a student of the Royal Academy in London in 1834, on the advice of Chantrey. During the year 1834 he worked in Chantrey's studio as a pupil, and in 1835 became a pupil of Bailey, under whom he remained for a year. In this year he obtained the Silver Medal in the Antique school at the Royal Academy. In August 1836 he left for Rome, where he studied for two years, Rome at that time holding a much higher position as a school for artistic education than it does now. Many stories he used to tell of his journey to Rome and travels in Italy, in those days made by diligence and steamer, and of the pleasant life in Rome, where students of all nations formed a society of their own, and where he met many famous men, such as Thorwaldsen, Gibson, and others, who were then in the midst of their career. Many of his fellow-students have since become famous and remained his lifelong friends; my father, however, survived nearly all his contemporaries.

In 1838 he returned to England, arriving just in time to see the Queen's coronation. He then took a house and studio in London, and actively commenced his profession. In 1840 he obtained a gold medal at the Manchester Exhibition, and was also elected an Associate of the Royal Scottish Academy, and in the following year obtained the Gold Medal of the Royal Academy, London. In 1833, when he was twenty years old, he exhibited at the Royal Scottish Academy his first work (a bas-relief of Sterne's Maria), which now stands in his studio beside his last statue, "Echo," finished last year when he was eighty. Between these dates an immense number of works were done. He was most industrious, never being so happy as when working, doing the whole of the modelling himself, and never at any time employing assistance, even for the mere building up of the figure.

In 1835 he first exhibited at the Royal Academy, and, with the exception of the two years when he was in Rome and in 1861 and 1866, he never missed a year until 1891, and he never had a single work rejected. In 1844 he was elected an Associate of the Royal Academy, and in 1852 a full member.

His sympathies were all on the side of ideal art, and he executed many groups and single figures from subjects taken from Greek and Roman mythology, from ancient history, and from English poetry. Many of his works were selected by the Art Union for prizes, and the small Parian reproductions of "The Dancing Girl reposing,"

* Mr. Fletcher acknowledges his indebtedness to the following gentlemen for assistance kindly rendered him while collecting the information contained in his Report: Mr. R. M. Hunt (*Royal Gold Medallist* 1893), architect of the Administration Building; Messrs. McKim, Mead, and White, architects of the Agricultural Building; Mr. D. H. Burnham, Chief of Construction; Mr. Geo. B. Post, architect of the Manufactures Building; Mr. Robert S. Peabody, architect of the Machinery Hall; Mr. Robert Craik Maclean, Editor of the *Inland Architect*; Mr. E. C. Shankland, Engineer-in-Chief to the Exhibition, and designer of the great roofs; Messrs. Adler and Sullivan, architects of the Transportation Building, and better known as the architects of the famous Auditorium Building at Chicago; Mr. S. S. Beman, architect of the Mines Building; Mr. Frank D. Millet, the well-known painter, and Director of Colour to the Exhibition; Messrs. Jennie and Mundie, architects of the Horticultural Building, who also volunteered much information about the steel construction of the tall buildings of Chicago. To Mr. D. H. Burnham he is specially indebted for his kindness in installing him in the draughting room of the Exhibition, and placing all the contract drawings and information of every description at his disposal; and for the sets of contract drawings and ironwork details, comprising Sections IX. and X. of the Report, presented by the author to the Institute. This unique and interesting collection of copies of the original drawings of the Exposition, for which the Institute is greatly indebted to Mr. Fletcher, comprises over 200 sheets, consisting of plans, elevations, sections, and details of the principal buildings. Three of the four volumes containing them measure some six feet by four.

"Sabrina," "Lear and Cordelia," &c., are well known. "The Dancing Girl reposing" gained the first prize of £500 at the Art Union in 1848. Some of his other principal ideal works, of which considerably more than one hundred have been exhibited at the Royal Academy, are: "Creation "of Adam," "Ophelia," "Paul and Virginia" (1843), "First Whisper of Love" (1845), "Sa- "brina" (1846), "Eurydice" (1847), "Ajax "praying for light" (1855), "Undine" (1863), "Venerable Bede" (1869), "Tali Players" (1873), "Prodigal Son" (1877), "Sabrina thrown into "the Severn" (1881), &c.

He also did several public statues, among others that of Sir Robert Peel at Manchester; Jenner, formerly in Trafalgar Square, now in Kensington Gardens; Crompton, the inventor of the spinning mule, at Bolton; Captain Coram, in front of the Foundling Hospital, and Sir George Grey in Cape Town. For St. Stephen's Hall at the Houses of Parliament he did a statue of Lord Somers and one of Lord Clarendon. In the great competition for the monument to the Duke of Wellington in St. Paul's he gained the first prize of £700 for his design, but owing to the site being changed from that originally proposed the competition was thrown over. He was, however, commissioned to execute the bas-reliefs, "Righteous- "ness and peace have kissed each other," and those on each side of the main subject, the other bas-reliefs in the chapel being executed by Woodington, who gained the second prize.

Of busts my father did a good many, one of the best being of the poet Rogers, who was a personal friend of his. Of sculpture purely to decorate buildings, his most important works were—the allegorical group of "Agriculture" for the Albert Memorial in Hyde Park, the tympanum of the pediment of Bolton Town Hall, and the two figures of "Learning" and "Justice" at the entrance of the late E. M. Barry's buildings at the Temple.

In 1861 my father was elected an Honorary Member of the Royal Scottish Academy. At the Paris International Exhibition of 1878 he was a British representative, and in recognition of his services received the order of Chevalier of the Legion of Honour. In 1891 he retired from the Royal Academy, and since then has only modelled the figure of "Echo," which has not yet been exhibited. In spite of his advanced years he was active, and enjoyed good health until last summer, when he began to fail, but was not seriously ill until April.

During the last few years of his life he has been finding homes for the original plaster models of his ideal works, his "brain children," in various public institutions and museums, such as the Children's Hospital, Bristol; Salford Museum; Science and Art Museum, Edinburgh; Mappin Art Gallery, Sheffield; Goldsmiths' Institute, New Cross; Imperial Institute; Battersea Town Hall, &c. Instructions have been left that more of these original plaster models may (in the discretion of his executors, and under certain conditions as to payment of carriage, &c.) be presented to public institutions possessing well-lighted positions suitable for statuary, but which are unable to purchase works of art.

Additions to the Library.

Professor Aitchison, A.R.A. [*F.*], has presented a pamphlet he received from Dr. Dörpfeld [*Hon. Corr. M.*], entitled *Ausgrabungen im Theater von Magnesia am Maiandros* (Athens, 1894), and Mr. Henry Frowde has sent *Archæologia Oxoniensis*, Part IV. (Oxford, 1894), containing, among other interesting articles, a short Paper "On the use of Lead as a Covering for Saxon "Churches," by Mr. J. P. Harrison, and a description by Mr. J. Oldrid Scott [*F.*] of the new "Win- "dow in Lichfield Cathedral." Mr. J. F. Wadmore [*A.*] has presented a collection of three pamphlets, written by himself, on "Thomas "Smythe," of Westenhanger, reprinted from *Archæologia Cantiana*, the first of which, dated 1887, is already in the Library. The complete work, well illustrated as it is, makes a valuable addition to the archæological notes of similar subjects preserved in the Library. *A Treatise on the Law of Support for Land, Buildings, and Public Works*, by George Banks, M.A., Barrister-at-Law, has been presented by the publishers, Messrs. Sweet and Maxwell, Limited.

While at the moment little is being published of architectural interest, notable old editions are being added to the Library, for, since the last issue of the JOURNAL, it has been enriched by the acquisition of two editions of Palladio, the former of which, chronologically, is *I Quattro Libri dell' Architettura* (Venice, 1616). The Institute possesses a first edition of this work, published at Venice in 1570, with the Earl of Burlington's autograph on the title-page, and the date January 1743. The other and more recent edition is Le Muet's translation of Palladio, *Traicté des Cinq Ordres d'Architecture*, with the translator's *Nouvelles Inventions pour l'Art de Bien Bastir* (Paris, 1647), first published in 1626. Richards translated this work (which contains interpolations of Le Muet's without his indicating the fact) for English readers in 1663, among whom it had a considerable vogue, and ran through a dozen or more editions, four of which are on the shelves of the Library. Another acquisition is Claude Perrault's *Ordonnance des Cinq Espèces de Colonnes selon la Méthode des Anciens* (Paris, 1683), first published seven years earlier, and known to English readers by James's translation (London, 1708), which is also in the Library. The Town Hall of Amsterdam must always be included among the remarkable buildings of the world, and the addition of an excellent monograph, *Afbeelding van 't Stadthuys van Amsterdam*, will be highly appreciated. Begun in

1618 and finished in 1655, it was designed by the author of the book, Jacob van Campen, who flourished in Holland about the middle of the seventeenth century, and of whom a remarkably fine engraving appears therein.

Two works dealing with architectonic science, which have been added, are Clermont's *La Géométrie pratique de l'Ingénieur, ou l'Art de Mesurer* (Strasbourg, 1723), and the third edition of *Traité de Stéréotomie*, by C. F. A. Leroy, revised and annotated by M. E. Martelet (Paris, 1862), and illustrated by seventy-four plates separately bound.

Le Musée Plantin-Moretus et ses Bâtiments à Anvers is a recent publication, by M. Max Rooses, director of the museum, and illustrated by some excellent etchings by M. B. Kriéger (Paris: Librairie Centrale des Beaux-Arts). The museum, founded in 1576 by Christophe Plantin, and containing the various collections of its founder, his son-in-law, Jean Moretus, and his descendants, after having been in the possession of several generations of printers, passed in 1876 into the hands of the Communal Administration of Antwerp, and a year later it was opened to the public. At the point where the Rue Grégoire-de-Tours joins the Boulevard Saint-Germain in Paris, M. Charles Garnier [*Hon. Corr. M.*] was commissioned in 1876 to erect, for an association of booksellers, &c., a building, of which a complete illustrated account is given in *Le Cercle de la Librairie, de l'Imprimerie, de la Papeterie, du Commerce de la Musique et des Estampes* (Paris: Cercle de la Librairie, 1881). *Enseignement de l'Architecture*, by Théodore Lachèz, containing numerous papers connected with the education of an architect as conducted at l'École Impériale et Spéciale des Beaux-Arts, l'École Centrale d'Architecture, and L'École Impériale Centrale des Arts et Manufactures (Paris: A. Lévy, 1868); the *Rapport Verbal* made by M. de Caumont at the meetings of the Société Française d'Archéologie held in 1861–62 (Paris: Derache, 1863); a reprint from the original (1859) edition, with additions, of *The Oxford Museum*, by Sir Henry Acland and John Ruskin (London and Orpington: George Allen); *Il Duomo di Parenzo ed i suoi Mosaici*, by the Cavaliere G. Boni [*Hon. Corr. M.*] (Rome: Tipografia dell' Unione Cooperativa Editrice); and a *History of St. Silin Church*, Llansilin, by Mr. Arthur Baker [*F.*], (reprinted from *Archæologia Cambrensis*); a Lecture by Mr. J. Wolfe Barry [*H.A.*] and a history and description by Mr. J. E. Tuit of the Tower Bridge, both noticed on this and the next page, complete the list of recent additions which call for particular mention.

There remains, however, to be noted a group of original drawings by Isabelle (whose work on *Les Édifices Circulaires et les Dômes, classés par Ordre Chronologique* is familiar to members) for the École Royale d'Arts et Métiers de Châlons, as approved and signed by the Secretary of State of Public Works, the drawings also bearing the signature of Isabelle under the inscription, "Ré-" digé par l'architecte soussigné, Paris, le 20 " Septembre 1842" (and later dates), which have come into the possession of the Institute.

REVIEWS OF NEW BOOKS. XI.

(30)

THE WATER GATE OF LONDON.

The Tower Bridge: A Lecture. By John Wolfe Barry, M.Inst.C.E. Large 8o. Lond. 1894. [*Printed for private circulation.*]

The Tower Bridge, its History and Construction from the Date of the Earliest Project to the Present Time. By J. E. Tuit, M.Inst.C.E., Engineer to Sir William Arrol & Co., the Contractors. 4o. Lond. 1894. *Price 5s. The "Engineer" Office, 33, Norfolk Street, Strand.*

The designer of a public building does not often receive from his contemporaries a whole-hearted triumph. So general is the dissatisfaction of the critics who buzz round a national monument that the creator of any conspicuous edifice must inevitably prepare himself for a measure of warm abuse. It is not altogether easy to account for this universality of disapproval, though much of it may be ascribed to the fact that the critics who give it birth are either experts who may be jealous, or laymen who must be ignorant. The disapproval and its universality still exist; and one is tempted to speculate whether our age, of all the ages, is alone incompetent to create, whether our age alone is the victim of a pessimism that can believe no good of itself, or whether indeed the grumblers have been at work through all the centuries. Perhaps they have been. Who knows but that the Parthenon may have been as much attacked by the cheap press of Athens (or its equivalent) as was the Albert Memorial in our day?—and the writer reserves the right to prefer the Parthenon to the monument at South Kensington, for all that. Once only in my recollection has a modern building been spoken well of by an evening paper; the paper was the *Globe*, and the building—well, the building, not to mention names, was and is an abortion!

The Tower Bridge, to come to the point, is now just ready for traffic and criticism. The attack has begun, and not the least interesting part of the little book which Mr. Wolfe Barry has kindly presented to our Library is comprised in the paragraphs which meet the current strictures of his critics.

Of course, the most confident attitude of attack is that which protects itself under a pseudo-Ruskinism; and, brandishing a Lamp of Truth, asserts that Mr. Barry, with his granite towers, has dressed up an iron structure to look like one whose strength lies in masonry—that, in fact, his great turrets are great humbugs. To the insinuation that the towers are deceptive the engineer

might reply, with the Scotch repartee, "That's a "lee." The criticism, being one of constructional propriety, could only come from a more or less initiated expert, whose trained sense of the laws of materials was offended, and no such person could ever for one moment be deceived into thinking that the towers consisted of stone-work only. Mr. Wolfe Barry might thus urge in his defence that the deception does not even momentarily exist. But he takes a gentler course. He points out, first, that he would have been obliged in any case to erect some sort of covering to the metal structure of his great piers, and secondly that the Parliamentary and other conditions under which the bridge was sanctioned enjoined its assimilation in design to the architecture of the Tower of London. It therefore became a question whether the steel skeleton should be enclosed in stone of some kind or in sheets of cast iron! Mr. Wolfe Barry very properly shrank from the attempt to imitate the Tower of London in the latter material; and the existing stone and granite structures were the result. The engineer thus amply justifies his use of materials, but he will, I am sure, permit the expression of an individual opinion that a less florid style of fenestration and ornament would have brought the new building more closely into harmony with the ancient fabric adjoining it, and that a certain gain in solid dignity might have been the result. Then, again, everybody has his likes and dislikes, and there may be some who would agree with me in wishing to see the stone finials removed from the octagonal turrets. They seem to mar the undoubted majesty of the general outline by a touch of flippancy in their exuberance.

It need not be said that those parts of Mr. Wolfe Barry's book which treat of the construction and the mechanism of the bridge are full of interest, but it should be announced that, with a singular consideration for those who are not engineers, he has explained the details in such a way that the most unlearned can understand them, and, further, that he has prefaced his account by a brief historical sketch of London bridges in general.

As a triumph of science, as a work of necessity, and finally as a gigantic enterprise, the bridge is a possession of which all Londoners must feel a Metropolitan pride; and, indeed, a competent and experienced critic has been heard to say that, having visited most of the important cities of the world, he has never seen a finer water-approach than the entrance to the City of London through the Tower Bridge.

Few of us have the means of personally instituting such a universal comparison, but I think all will admit that to fling across the Thames a structure which should avail itself of all the newest resources of the engineer's art, and should at the same time harmonise with an adjoining building which is by many centuries its senior, was a task which might most easily have ended in miserable bathos. This is the task to which Mr. Barry and his colleagues have set themselves; to have succeeded in it to the utter satisfaction of all critics was impossible, but to have avoided the apparently inevitable anticlimax is a result on which, apart from their engineering triumph, they may well be heartily congratulated.

Another work on the same subject, by Mr. Tait, M.Inst.C.E., engineer to Sir William Arrol & Co., who were the contractors, has been presented by the publishers. It is a republication in book form of articles which have appeared in the *Engineer*, supplemented with detailed descriptions of the foundations and superstructure. In the matter of drawings it is very complete, and contains a reproduction of Mr. Wyllie's sketch, which realises to the full the poetry of the conception.

PAUL WATERHOUSE.

(31)

ARCHÆOLOGICAL SURVEY OF INDIA.

Annual Progress Report of the Archæological Survey Circle, North-Western Provinces and Oudh, for the year ending 30th June 1893.

Epigraphia Indica, Vol. II. Part XIV. of the Archæological Survey of India. Edited by James Burgess, C.I.E., LL.D., &c., assisted by A. Führer, Ph.D., Archæological Surveyor, North-West Provinces and Oudh. La. 8o. Lond. 1893. *Messrs. Kegan Paul, Trench, Trübner & Co., Charing Cross Road, London.*

This *Progress Report*, which has been presented by the Chief Secretary, N.-W. Provinces and Oudh, contains two Reports—the first by Dr. A. Führer, Ph.D., Archæological Surveyor; and the second by his Assistant, Mr. E. W. Smith, who is entitled "Architectural Surveyor."

Dr. Führer's Report is supposed to be devoted to the "Epigraphical Section," but it also contains some interesting details relating to architecture. Rajputana was the field of his explorations in 1892–93, when he visited Ajmir, Pushkar,* Mount Abu, Udaypûr, Nâthdvâra, Chitôrgarh, Dhar, Mandu, Sanchi, and other places less familiar to the general reader. Over much of this ground Colonel James Tod threw the glamour of his enthusiasm when he published his *Annals and Antiquities of Rajasthan* as far back as 1829. I have visited most of the localities, and sketched many of the structures mentioned in the *Report*. The first cold season I was in India enabled me to see the Mohammedan architecture of Delhi, Agra, and Fatehpur Sikri, and the first impression produced on my mind was the great superiority of the structures in these places over the works of the Hindus; but

* "Pushkar," this is the new spelling. I have always known the place as "Pokur." I shall of course follow the orthography of the *Report*. The place is nine miles from Ajmere. Dr. Führer mentions the temple of Brahmâ, but he does not say that it is the only temple in India dedicated to that god.—W. S.

the next season enabled me to see the Hindu architecture of Rajputana, particularly the extensive remains of Chitôrgarh. While among these I was inclined to rank them as the best, my final conclusion being that it would be difficult to decide which were the superior.

At Ajmere, anciently called Ajayamera, Dr. Führer reports upon the old Masjid there, which has the curious legend attached to it, perpetuated to this day in its name, *Arhâi-din-kâ-Jhônprâ*, or the "Shed of two-and-a-half days," the time supposed to have been occupied in building it. Like the old Masjid at the Kutab—old Delhi—this one was also largely constructed out of the pillars and fragments of destroyed Hindu or Jaina temples. In 1875-76, on removing the débris of the fallen cloisters on the north side of this Masjid, six large slabs of polished black marble were found, bearing inscriptions in Sanscrit and Prakrit. These turned out to be portions of two unknown plays, entitled *Lalita-vigrahar âja-nâtaka*, and were composed in honour of Vigraharâja, Deva of Sâkambhari, the modern Sâmbhar. Their date is about the beginning of the thirteenth century.

Mount Abu and its famous temples are described in the *Report*, but there is nothing new to record. Udaypûr is not an ancient place. It was founded in 1568 by the Rana Uday Singh, after the last terrible sack of Chitôrgarh, when Akbar took the place. At that siege, when the city could no longer be defended, a *johur* was proclaimed—an empty tank was filled with the wood and ghee that remained; these were set fire to, and all the women and children thrown into the midst. Tod tells that after that "eight thousand Rajpoots ate "the last *beera** together, and put on their saffron "robes; the gates were thrown open, the work "of destruction commenced, and few survived "'to stain the yellow mantle' by inglorious sur-"render."† Chitôrgarh—in the inscriptions it was called *Chitrakûta*—was the old capital of the ancient Rajput State of Mewar. The Ranas of Mewar represent one of the oldest Royal families in India; they can trace their descent back through the Suryavansa and the Chandravansa. These are the solar and lunar races of mythic antiquity, to which all old family pedigrees in India aspire if possible to be connected with. This old city stands on a plateau from two to three miles in length, and from 300 to 450 feet in height above the surrounding plain. The position is a very strong one, for the sides of this tableland are formed of rocky scarps, on the top of which are the embattled ramparts and defensive towers that enclose the town. Within these walls there yet remain the public buildings, temples, palaces, towers of victory,* tanks, &c., as well as the streets, market-places, and all that belonged to the city at the date of the last sack, when it was abandoned, and has remained deserted ever since. I have seen many ruined cities, but I can recall none which has left the same impression on my mind, an impression no doubt produced by the splendid buildings and the great size of the place, standing there on the hill-top solitary and silent. When I visited this place in 1861, it cost me many nights' journey carried in a *dooly*, having to put up in villages during the day while my dooly-bearers slept and rested. Often there was no accommodation for travellers, and I had only a shed or the shadow of a tree to rest under; and for food, a share of my dooly-bearers' was all I had to depend upon. This will explain how at that time very few people had seen or heard of the glory of the spot. Now a railway runs past it, and in the future it is more likely to be visited by those who are able to appreciate its architectural remains. I venture to predict that when these have been properly drawn and photographed, Chitôrgarh will enjoy a fame that will stand in the first rank, and that the art on its monuments will be the subject-matter of many a pencil and pen.

From Chitôrgarh Dr. Führer went on to Bijôlî and Dhâr, the latter being the ancient capital of Mâlava, or Malwa. There are two Masjids here which have been erected out of the material of older Jaina temples, similar to what took place at Delhi and Ajmere. One of these is called the "Lât Masjid," from a fragment of an iron column, or Lât, lying near it. This piece is 24 feet in length, and is not round, but square. Fergusson† mentions this, but thinks that the iron had only been used by the Hindus for some constructive purpose. Dr. Führer now reports two other pieces, one of which stands in the Maharaja's guest-house, and has a "bell capital"; as these are probably only fragments of one original piece, the "bell capital" is sufficient to show that it has been a Lât similar to the one now at Delhi.

Near to Komalmer, in the Arâvali range, the existence of a temple of the Chaunsath Yoginîs is reported. These are The Sixty-four Female Demons. It is described as "a primitive temple," and the statues, which I assume are those of the sixty-four demons, "are all of the purest white "marble, each about 3 feet in height, and well "executed." The walls of the courtyard were once entirely covered with immense slabs of black marble "bearing inscriptions of the eleventh

* "The beera, or pán, the aromatic leaf so called, "enveloping spices, terra japonica, calcined shell-lime, "and pieces of the areca nut."—Tod.

† Tod's *Rajasthan*, vol. i. p. 327.

* These are the two celebrated towers. One is the Jayastambha, erected by the Râna Kumbhakarna, to commemorate a victory he gained in A.D. 1439. The other is a Jaina tower: it is a Kîrttistambha, and was erected in Samvat 952. It was dedicated to Rishabhanâtha, the first Tîrthamkara. Reproductions of my sketches of these towers will be found in the TRANSACTIONS, Vol. V. New Series, pls. xiii. xiv.—W. S.

† *Indian and Eastern Architecture*, p. 241.

"century, but now only a few fragments are left." It is to be regretted that the *Report* gives such slight details of the remains, for very few of these temples are known to exist in India. Cunningham stated* that only five temples of this kind had, up to 1879, been discovered. The most of these were circular, but one at Khajurâha was quadrangular.† Perhaps the best known of these temples is the one at Bhera Ghat, near the Marble Rocks on the Narbada, of which I sketched a portion in 1861. This is a circular temple, 130 feet in diameter, with a cloister all round formed of eighty-four cells: these contain statues of the sixty-four Yoginîs, and twenty other figures. There is a question as to whether the circle constituted an hypæthral temple in itself, or was only the outer enclosure of a central shrine. Details of the one found in Rajputana would have been valuable for comparison with those previously known.

Dr. Führer's *Report* ends with a visit to Sânch-Kânakherâ, or the "Bhilsa Topes," and records the finding of a large number of new inscriptions, amounting to nearly 400, among which 378 are legible, against 198 in Sir A. Cunningham's book; and Stupa No. 11 has yielded, instead of 43, nearly 100, among which 78 are legible. In addition, some statues of Buddha, with interesting dedications, have come to light during the excavations.

The *Report* of Edmund W. Smith deals almost entirely with the details of the work done, that is, the drawings, photographs, &c., which have been produced by the staff under his charge. A few of the photographs are given with the *Report*.

In noticing former issues of the current valuable series of the *Epigraphia Indica*, it was explained that, although the inscriptions are chiefly of value in relation to Indian history, yet they often have references to temples which should not be overlooked. The last Part, which has been presented by the Government of India, chances to contain an exceptional article by Dr. G. Bühler, on some Jaina sculptures which were found at Mathura by Dr. Führer in his exploration of the Kankâlî Tîlâ‡ in 1890–91.§ The Jainas, it may be explained, were a sect that came into existence about the same time that Buddhism appeared; and the teaching of the two sects was closely allied. When Buddhism disappeared it is supposed that many who belonged to it went over to Jainism, which has existed down to the present day. They are a large and very wealthy body, and have many splendid and costly temples, those on Mount Abu being perhaps the best known. Although their more modern temples are plentiful, remains of their older architecture are scarce—indeed, I might say that, up to the present, hardly any vestiges of it have been brought to light. Cunningham mentions the finding at the Kankâlî Tîlâ, in 1871, of some Jaina sculptures and inscriptions,* but none were said to have any indications of architecture upon them. This serves to prove the value attaching to Jaina sculptures that may chance to have upon them any scraps of architecture; and those lately discovered at Mathura are partly fragments of this kind, some of the sculptures having representations of stûpas upon them. Dr. Führer has a comprehensive work in hand upon these sculptures and inscriptions; but in the meantime he has allowed Dr. Bühler to publish some of them in the *Epigraphia Indica*, where four plates appear, reproductions from photographs. The first plate supplies us with a new term in Indian architecture; it is "*Âyâgapata*." The word, Dr. Bühler says, is clearly enough made out on the inscription. The sculpture to which this name belongs is a slab 3 feet by 2 feet 8 inches, covered with ornament and symbols, with a figure of a Jina in the centre. Several of these slabs have been found, and Dr. Bühler states that the name, *Âyâgapata*, "may be appro-"priately rendered by 'tablet of homage or wor-"'ship,' since such slabs were put up in temples, "as the numerous inscriptions on them say, 'for "'the worship of the Arhats.' The *Âyâgapatas* "seem to be a distinctive feature of the ancient "Jaina art, as neither the Buddhists nor the "orthodox sects mention them." The small Jina in the centre of this tablet scarcely differs from the common *dhyani* Buddha sitting cross-legged. It has the *chhatra*, or umbrella, over his head. Four *trisulas*, in form the same almost as the Buddhist examples of this symbol, fill up a belt round the Jina. The most prominent object on the tablet fills up the circular belt next to the last; it is so large, beyond that of the other symbols, that one may hazard the conjecture that it may have been the special thing the Arhats bestowed their homage upon. Dr. Bühler does not identify it with the *swastika*, but it seems to me to be only a peculiar variety of that symbol, the marked difference being that the four limbs, instead of being *gammas*, are curved forms, and apparently intended to represent the halves of *trisulas*. Is it possible to suppose that this figure was intended as a combination of the two symbols? In each of the four circles formed by the curves there is a symbol: these are a *swastika*, a *trisula*, two fish, and what is supposed to be a monogram. In the belt encircling this, which is so narrow that it is only intended as a kind of border, there are small female figures represented as running or flying: the four centres of this belt contain, first, a small figure sitting cross-legged; two of the spaces have sacred trees;

* *Archæological Survey of India*, vol. ix. p. 62.

† A plan of this will be found in Fergusson's *Indian and Eastern Architecture*, p. 246.—W. S.

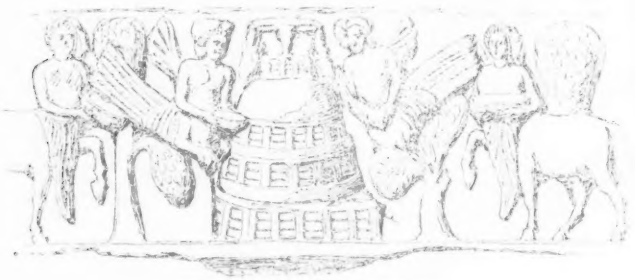
‡ *Tilá*, a mound or hillock.—W. S.

§ See *The R.I.B.A. Journal*, Vol. IX. N.S. p. 468.

* *Archæological Reports*, vol. iii. p. 19.

and the fourth has a stûpa, unfortunately so small that its details cannot be made out. The four outer triangular corners have in each of them a female figure that appears to be holding up the whole of this circular frame of symbols. These figures, instead of legs, have long continuations that may be serpents, or perhaps they are only intended as ornamental rolls. It can scarcely be said that there is anything in these details we are unaccustomed to, and yet the whole combination is different from what we are familiar with on the old Buddhist sculptures.

The second plate contains three subjects: the first of these is of great interest from its bearing on a noted Jaina legend, which is very ably worked out by Dr. Bühler. The other two are relievos "found on the fragment of a doorstep from one "of the two temples buried under the Kankâli "mound." On one of these relievos there is a representation of a stûpa, and although small, yet the main features of it are distinct enough, and it may be accepted at least as a rough model of a Jaina monument of this kind; and on that account



STÛPA ON JAINA SCULPTURE, MATHURA.

it is a welcome addition to our knowledge. A sculpture at Sanchi has a stûpa upon it which resembles this one from Mathura in most of its details.* The winged figures, like sirens, presenting offerings—*Suparnas* Dr. Bühler calls them—are almost the same in both sculptures; but in the Mathura one there are a number of *Kinnaras*, or centaurs, who are also bearing offerings for the stûpa. The stûpa in the Sanchi sculpture is exceptional in its great height, and from this Fergusson suggested that it may have been the representation of one of the Afghanistan Topes, which are much higher in proportion to their width than those at Sanchi. The costume and appearance of the figures worshipping at this stûpa differ widely from those in the other sculptures; this made it probable that they were some tribe not belonging to the plains of India, and they might be a late migration, or they may have been a party of pilgrims from across the Indus. Now that we have the representation of a Jaina stûpa, we find that it is also higher than those usually represented in the Sanchi sculptures, or the Sanchi stûpa itself, whose proportions we know exactly. One very noticeable feature in the Sanchi example just alluded to is that it has three rows of the "Buddhist Railing" represented upon it, one above the other, and the Mathura one has the same number, to which it may be added that the old position of the rails in both cases is very much the same. The small stûpa on the *Âyâgapata*, although indistinct as to its details, is also a tall one. On pl. iii. there is a small stûpa with two rows of the "Buddhist Railing" upon it: this also shows the structure as being high in its proportions. These facts do not help us in solving the peculiar problem presented by that particular stûpa of the Sanchi sculptures; that which had been accepted as a probable explanation now falls to the ground, thus leaving the whole question to be begun again.

Plate iii. shows the reverse and obverse sides of a sculptured *Torana*.* Without its surroundings it is difficult to form an idea as to what may have been the construction and appearance of the gateway to which this slab belonged. The sculptures on this fragment are, although of a primitive character, most carefully and beautifully executed—finer, I should say, than anything on the Sanchi *Toranas*. The curved belts of ornament are very fine, being both varied in design and delicate in every way.

Plate iv. has no architecture upon it. The only point of interest is that of a *Dharmachakra*, or "Wheel of the Law," which stands upon a *trisula*, and with the exception of a slight detail or so is the same as those on the Buddhist sculptures. An inscription gives its date as Samvat 79, or 156-197 A.D. The group of sculpture with this wheel was the gift of a female lay disciple, and "was set up at the Vodva stûpa, built by the gods." This phrase Dr. Bühler interprets as meaning that it was so ancient that its real origin had been completely forgotten. This would imply that stûpas among the Jainas were no new thing. This is confirmed by some remarks of Dr. Bühler's on the stûpas described above. He says: "With "respect to the stûpa, which we shall meet "again more than once in the other plates, I "repeat that it is a form of the funeral monu-"ments once used and worshipped by all Indian "sects that followed the *Jñâna* and *Bhakti* "*Mârgas*, and I refer for some of the reasons for "this theory to my article *Vienna Or. Journal*,

* Fergusson's *Tree and Serpent Worship*, pl. xxviii. fig. 1.

* *Torana*, it may be explained, is a term now applied to such structures as the gateways at the Sanchi Stûpa.—W. S.

"vol. iv. pp. 328f. I may add, however, that "Brahminical Chaityas* are occasionally men- "tioned in the *Mahâbhârata*. Thus we read "(*Mah.* 1, 109, 13–14): 'That country, O king, "'protected on all sides by Bhîshma, in accord- "'ance with the sacred law, became lovely, being "'adorned with hundreds of *Chaityas* and sacri- "'ficial posts.' The juxtaposition of the Chaityas "and Yûpas† shows that Brahminical sacred "buildings, probably stûpas, were meant."

I must give Dr. Bühler's concluding remarks, as they show the progress that is being made in the archæology of Indian architecture. He says: "These new sculptures from the Kankâlî Tîlâ "teach the same lesson as Dr. Bhagvânlâl's "Mathura slab published in the *Transactions of* "*the Leyden Congress*, and prove that the ancient "art of the Jainas did not differ materially from "that of the Buddhists. Both the sects used the "same ornaments, the same artistic *motives*, and "the same sacred symbols, differences occurring "chiefly in minor points only. The cause of this "agreement is, in all probability, not that the "adherents of one sect imitated those of the other, "but that both drew on the national art of India "and employed the same artists. Full proof of "this assumption, which modifies the statements "in some standard works on Indian archæology "regarding the development of ancient Indian "art, can only be obtained by the excavation of "really old Brahminical temples. And it is to this "task that the Archæological Survey in India "ought to direct its attention, as a thorough "exploration even of a few Saiva and Vaishnava "temples, which date from the second or first "century before our era, will do more for our "knowledge of the history of the Indian religions "than the excavation of a hundred stûpas or "Vihâras. But even at present various pieces of "collateral evidence are available which support "the view that all the general Indian sectarians "took their sacred symbols and the ornaments of "their temples from one common store-house. "Chief among these is the now generally acknow- "ledged fact that the Brahminists, the Jainas, "and the Buddhists, all and at the same time "contributed to the development of the cave "temple architecture which formerly was con- "sidered to be a speciality of the Buddhists. It "is now conceded that the oldest known caves at "Barâbar and Nâgârjunî belonged to the Vaish- "nava Âjîvikas, and those near Katak to the "Jaina worshippers of the Arhats. The un- "doubtedly Buddhist Lenas date from somewhat "later times. It is, therefore, not in the least "doubtful that all old Indian sects used rock- 'excavations for sheltering their ascetics who "wished to live in retirement, and sometimes also "their idols; and it is highly probable that this "usage goes back to times antecedent to the rise "of Buddhism and Jainism. In the face of such "facts one can only say that it would be sur- "prising if the worship of stûpas, of sacred trees, "of the Wheel of the Law, and so forth, more or "less traces of which are found with all sects, as "well as their representation in sculptures, were "due to one sect alone instead of being heirlooms "handed down from remote times before the "beginning of the historical period in India."

These words show that the study of Indian architecture is not standing still; while at the same time they warn us that some of the older theories which have been accepted will require modification in the light of later knowledge. As to the importance of exploring a Saiva or Vaish- nava temple of the last two centuries B.C.; in noticing a *Progress Report* in these pages last year,* I called attention to a statement in it that at the site of the ancient Adhichhatra in Rohil- khand, Dr. Führer had come upon "a large two- "storied Saiva temple, built of carved brick, and "dating from the first century B.C." Dr. Bühler's opinion, as expressed above, will show I was not far wrong in saying at the time that this was a "startling announcement." Dr. Führer's account of this temple has not yet been published, but when it appears, new light may be expected to be thrown upon many points that are yet doubtful regarding the early architecture of India.

WILLIAM SIMPSON.

(32)

THE SENTIMENT OF BEAUTY IN TOWNS.

Esthétique des Villes. Par Ch. Buls, Bourgmestre de Bruxelles, Membre de la Chambre des Représentants. 8o. Bruxelles 1893. *Printed for private circulation. Émile Bruylant, 67 Rue de la Régence, Brussels.*

An Essay by the Burgomaster of a capital city, with especial reference to the domain he tem- porarily governs or controls, will seldom fail to interest readers; but when the subject of it is treated from a high æsthetical standpoint and made generally applicable to all historical towns, as in the pamphlet under review, it becomes almost a duty, at least for architects, to consider it care- fully and try to profit by the suggestions and arguments it contains. This is the more desirable in the present case, because M. Ch. Buls forwarded his Essay early in the current year to the Lord Mayor of London, who then confided it to the Institute, and whose gift was briefly acknowledged at the time [p. 186].

M. Buls is, wisely, an admirer of the picturesque which is derived from chance, not art: the old cities grew, and extended themselves little by little, as necessities or needs ordained and in con- formity therewith, sometimes along the banks of

* *Chaitya* is generally understood to be the same as Stûpa, but it is supposed that there was another very similar form of monument which may be at times meant by this word.—W. S. † Sacrificial posts.—W. S.

* *The R.I.B.A. Journal*, Vol. IX. N.S. p. 422.

a stream which ultimately dried up or was vaulted over, and its sinuous course left naturally a curved, irregular, serpentine-like highway; sometimes round the foot of a hill in a semicircle, or up the hill in spiral fashion. If in a wilderness it were necessary to build a town, M. Buls would follow the same conditions, as hill, or watercourse, or plain directed. He would not lay out a new town with streets straight and at right angles to each other like the "Bastides" or Free towns founded in France by Edward I. of England. He thinks it all very well for Americans to do so on a perfectly level site—which, by the way, they do not—and obviously he would have preferred the tortuosity of half a dozen up-and-down streets like those which used to lead to the Northern Railway Station in Paris, before the Rue Lafayette was pierced; and he would have denounced an innovation which permitted the miserable *cocher-de-fiacre* to toil slowly up an easily inclined plane along a broad straight avenue, instead of whipping his more miserable horse *au pas* up the narrow and irregular streets which that magnificent thoroughfare replaced or ventilated. M. Buls, nevertheless, admits that a rational being having to go from one point to another in a town should be allowed, if the option be possible, to do so in a straight line: hence his indignation that a once-open space in Brussels, across which the public had made tracks in a logical and practical fashion, was laid out for building purposes without regard to those "courants naturels de la circulation." The public had found out for itself that two sides of an equilateral triangle were greater than the base, but the landowner and the builder cared little for that; they made their streets and built their houses so that the public had afterwards to renounce its short cut, to give up the diagonal, and take the two sides of a rectangle—as many a bigger public in a bigger city than Brussels has had to do, during many generations of men invincibly ignorant of the "Esthétique des Villes," and bereft of a Burgomaster to bewail their lot.

But M. Buls, though not afraid here and there to tilt at a windmill, has words of exhortation which none can afford to ignore. Architects would produce, he says, more satisfactory plans of sites and of public buildings, more original and more durable, if they would take advantage of topographical accidents, of practical exigencies, and of needs imposed by the use to which the buildings are destined. They should not hesitate to alter the course of a street or pierce a block of buildings if by so doing the view can be obtained of a tower or spire, or of some interesting monument. Happy Bruxellois! What architect would not serve you if such things were always possible! But surely Brussels, being an old historic city, must have landed proprietors with rights which architects must respect! M. Buls is on firmer ground when he reminds architects that nowhere in the old Brussels can there be found a *place* or square created—planned with malice aforethought—as is often the case in modern towns, simply to exhibit a monument, a palace, a church, like the Place des Palais, the Place Poelaert, and the Place de la Société Civile. He says: "Quand "une place n'a pas de *destination utilitaire*, elle "est morne et déserte; elle est une création arti-"ficielle, manquant de vie et ne justifiant pas son "existence." The old "places publiques" were markets, places of assembly for trade or other purposes, as may be verified in every part of the old world. He does not object, though, to the formation of a *place* where several main roads meet; and Logic or Reason—both objectionable critics—may urge that a fountain or a monument of some sort to mark the centre of such a *place* is not æsthetically, or even practically, useless.

There are a few excellent passages in the pamphlet which must not be spoiled by translation. For instance:—

C'est de la vue horizontale que les architectes devraient surtout se préoccuper et non de la vue cavalière [*bird's-eye view*], sensible seulement pour les aéronautes qui planent de loin en loin au-dessus de la ville (p. 13).

. . . . . .

Les administrateurs d'une grande ville qui a une histoire et qui conserve des restes trop rares, hélas! du passé, ne doivent pas se préoccuper uniquement des intérêts de la viabilité. Ils doivent se souvenir qu'ils appartiennent à une nation qui compte dans l'histoire de l'art et chez laquelle les bourgeois mettaient leur fierté à orner la cité natale. . . . Une ville prospère doit fatalement se transformer, s'adapter à des besoins nouveaux de circulation, à des exigences de propreté, d'hygiène et de confort. Mais cette évolution ne doit pas se faire brutalement, elle doit s'opérer avec un respect filial pour tout ce qui peut, sans inconvénient, être conservé de souvenirs anciens (p. 15).

. . . . . .

Nous ne voyons que deux sources d'inspiration pour les artistes qui cherchent à être de leur temps et de leur pays. C'est l'interprétation ornementale des formes qui dérivent des matériaux employés dans la construction et l'adaptation de motifs puisés dans notre architecture nationale à la destination de l'édifice (p. 29).

. . . . . .

C'est le quartier [*a fashionable part of Brussels*] des palais et des hôtels princiers, conçu à une époque où les règles académiques empêchaient de comprendre la valeur et la poésie des quartiers bourgeois (p. 35).

When it is added that M. Buls has a good word to say for the English villa and domestic architecture generally, that he is able to describe, in pleasant badinage, the various architectural fashions that have had their day in Brussels during the last thirty years, christening one, "le "style ébéniste," because the houses resemble "de grands buffets avec une ornementation con-"venant beaucoup plus au bois qu'à la pierre"; when it is known that he can quote James Fergusson's *History of the Modern Styles* with effect; that he has seen the classical world, and especially Greece; that he criticises the alterations, developments—improvements or otherwise—of his own city with technical acumen, it is impossible not

to congratulate the Belgian capital upon its choice of a Burgomaster, and the Burgomaster upon the subject he has chosen for a thoughtful and well-written Essay. WILLIAM H. WHITE.

NOTES, QUERIES, AND REPLIES.

The Tower Bridge.

It may be of interest to members to be reminded that there exists in the Library a chromo-lithograph, presented by the Bridge House Estates Committee on 30th November 1887, bearing an inscription as follows: "The Tower Bridge—the "memorial stone was laid by H.R.H. the Prince "of Wales on behalf of H.M. the Queen on 21st "June 1886, the Right Honourable John Staples, "Lord Mayor, Edward Atkinson, Esqre., Chair-"man of the Bridge House Estates Committee." On the left of the inscription are the words "John "Wolfe Barry, Engineer," and on the right, "Sir "Horace Jones, Architect." Those who are curious in this matter may like to examine the drawing of 1886 (designed in 1885) and compare it with the finished structure to be opened to the public on Saturday; and they cannot fail to note remarkable divergencies from the architect's original sketch. This fact has probably had its just influence upon Mr. Wolfe Barry, who, when acknowledging the assistance rendered to him by his early collaborator, says [in the pamphlet of which a review appears on p. 563]: "I cannot "but express my great regret that the work was "so soon after its commencement deprived of the "architectural knowledge and experience of Sir "Horace Jones, and that he has not lived to see "the mode in which his conception of a large "bascule bridge across the Thames has been "realised." A full description of early designs for the Tower Bridge is given in Mr. J. E. Tuit's book, also noticed in the Review before mentioned, and an elevation of the design of 1885, by "Messrs. Jones and Barry" will be found on page 27 of that book.

The Condition of the West-End Streets.

From JOHN HEBB [*F.*]—

A recent traveller, Mr. Georges Montbard, in his entertaining book *Among the Moors*, thus describes a street in a Moorish town:—

> It is incredible what things there are in this street—this canal, rather—this cloaca maxima. . . . What don't you find there! carcasses, vegetable refuse, animal ordure, old rags, loathsome pallets swarming with vermin, broken furniture, disjointed cages, blocks of stone. It is, in fact, the *tout à l'égout* in the strictest sense of the word. And these things will remain there for days, months, years, until the wood rots, the vegetables putrefy and return to the soil; until the shreds torn from the carcasses shall disappear in the maws of the vultures. And when the broiling sun shall have dried up these marshes, calcinated these bones, what remains will return to dust under the hoofs of mules and the tramp of human feet.

This description, with some little modification, will apply to the condition of some of the streets of London. It is true we have no vultures in London, but then they are a palliative, and not an aggravation.

Lord Randolph Churchill has done well in calling attention to the "stercus odoriferæ collu-"viesque viæ" of the West End of London (he does not trouble himself about the streets of other parts) which render the Metropolis a standing disgrace to the local authorities and a source of amazement to foreigners. It must be evident to everybody acquainted with the subject that it is impossible to properly cleanse roads without using water, and that in abundance. In all Continental cities the principal thoroughfares are regularly flushed with water at night or in the early morning, and the streets thus kept free from the accumulation of refuse. This is done in the City of London, where the work commences at eight o'clock in the evening, and is usually continued until eight or nine o'clock the following morning. There can be no valid reason why this system should not be extended to the whole of the Metropolis. It is only a question of expense, and this should not be allowed to stand in the way of an obvious and indeed necessary improvement. What renders the adoption of this system difficult for London is the high cost of water, which is due to the fact that the water supply is in the hands of private monopolists, and not, as is the case with Paris and many of our large provincial cities, in the hands of the municipality. The average cost of water in London is 4*s.* 4*d.* per annum for every head of the population, while in Paris (where the supply is much more abundant) the cost varies from 2*s.* 1*d.* to 2*s.* 5*d.*, or about one-half that for London, and this comparative cheapness accounts, no doubt, for the cleanliness of the Parisian thoroughfares.

Mr. Weaver, the Surveyor to the Vestry of Kensington, attempted to excuse the shortcomings of his vestry by pleading that it would be impossible to introduce the Paris system in London in consequence of the insufficient size of the sewers and the amount of traffic in the Metropolis, and wound up his apology by asserting that no comparison could be made between Paris and London, as Paris was a city of pleasure and London a city of business; an assertion which must be very amusing to anybody acquainted with the inner life of the former city, and whose experience is not limited to an acquaintance with the Boulevards and the Rue de la Paix. Lord Meath effectually disposed of these excuses by pointing out that there need be no interference with the traffic if the work of cleansing the streets were done during the night or the early hours of the morning, and were entrusted to an efficient staff, and not to aged and incapable men, employed merely to keep them off the parish and reduce the rates.

The question of confining the work of cleansing the streets and removing refuse to certain hours is an important one, and ought to be pressed upon the vestries. These operations go on all day long, and it is not an uncommon thing to find our finest thoroughfares obstructed in the busiest part of the day by tumbrils and mudcarts. There is, however, no reason why the removal of refuse and the cleansing of streets should be one of the most prominent features of London life as it is at present. Byron contrasted the difference in this respect between Italy and England: in Italy

> Reeling with grapes a waggon stops the way;
> In England 'twould be dung, dust, or a dray.

The contrast is indeed a striking one. We sneer at the sanitary condition of Italian cities, but it is to be doubted whether the *immondizzajo* and the *pozzo nero* are any worse than the chaotic arrangements which do duty with us for municipal sanitation.

Concrete Pile-Driving.

From F. DE J. CLERE [*F.*], Wellington, N.Z.—

Though Wellington, N.Z., is one of the best situated capital cities in the world as a commercial distributing centre, it has had the great drawback of possessing but little level land for building purposes within reasonable distance of its wharves and jetties. This being the case, reclamation has been resorted to, and the best sites, extending over many acres, were a few years ago covered with the water of the harbour to a depth of from twelve to fifteen feet. The material used for reclamation was loose rock and clay taken from the hillsides in the vicinity, and offers a poor foundation for brick buildings. Generally piles of Podocarpus Totara (a very lasting timber) have been driven to a solid bottom and then covered with concrete. Some fourteen years ago the acting colonial architect, Mr. Burrows, used concrete piles as a foundation for the Supreme Court building, but for some reason or another the experiment was not repeated until a few months ago, when my firm again used the same materials for the foundation of a four-floored brick warehouse for Messrs. Sharland & Co. Whether our *modus operandi* was the same as that of Mr. Burrows I cannot say; but feeling that our experience might be of service in other cases, I am venturing to send you this record of the matter. The building we were to erect was a wholesale drug store, 100 feet long by 40 feet wide, and having three floors above the ground, the walls being of brick of ordinary thickness, resting on a good concrete foundation, which rested in its turn on concrete piles. The "plant" required to put these piles in position consisted of two steel "cylinders" as sketched, a wooden "dolly" of Australian iron bark, an ordinary derrick and 25 cwt. monkey, and donkey engine and winch, and for each pile a cast-iron shoe (weighing 72 pounds each), formed as shown in fig. 1. After excavating for the concrete footings the shoe of the pile was placed in position, and the cylinder lowered on to it; a small portion of sand was then thrown in to form a cushion for the "dolly," and a "grummet," or ring of rope, was placed between the top ring on the "dolly" and the top of cylinder, in order to prevent the jar burring the latter. The whole pile was then driven in the ordinary way two feet into the solid original bottom of the harbour, and the "dolly" withdrawn from the cylinder and the next cylinder driven. The first cylinder was then pumped dry and filled with concrete, and by means of a rope passing through blocks hung above it, and carried to winch of donkey engine, the cylinder was drawn, and the semi-liquid concrete left in the ground in the shape of a pile about 13 inches in diameter. The second cylinder was then treated in the same way. The piles in the long stretches of walling were spaced about three feet apart and arranged as in fig. 2; but when they had to be closer we found it necessary to leave the cylinders in the ground, as the power at the contractor's disposal was not sufficient to draw them out of the lightly compressed soil. These cylinders, having to be driven only once, were made of thinner material than the rest. It should be noted that as the concrete had to spread out as the cylinder was drawn, a 12-foot-long cylinder was required to make a 10-foot-long pile; and I would here note that the reason why the second cylinder was driven before the first one was drawn was in order to prevent the soft concrete in the latter from being damaged by the pressure of the second cylinder.

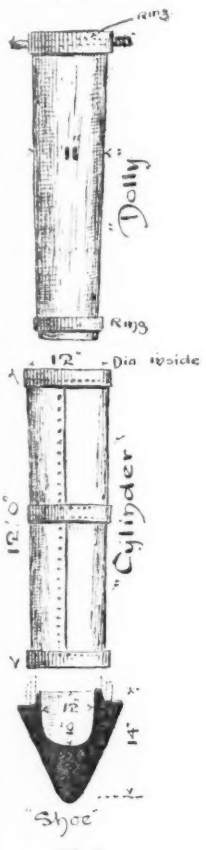


FIG. 1.

The stuff used for the reclamation being porous, we found that the tide rises and falls in trenches as in the harbour; hence the necessity of pumping out the cylinders; and it was very noticeable that at high tide the cylinders were much more easily drawn than at low. The number of piles driven in a day averaged seven.

FIG. 2.

9, CONDUIT STREET, LONDON, W., *28th June* 1894.

MINUTES. XVII.

At the Sixteenth General Meeting (Ordinary) of the Session, held on Monday, 25th June 1894, at 8 p.m., Mr. F. C. Penrose, F.R.S., *President*, in the Chair, with 58 Fellows (including 19 members of the Council), 52 Associates (including 2 members of the Council), 2 Hon. Associates, and 27 visitors (exclusive of several ladies), the Minutes of the Meeting held 11th June 1894 [p. 541] were taken as read and signed as correct.

The Secretary announced the decease of William Calder Marshall, R.A. [*H.A.*]

The following members, attending for the first time since their election, were formally admitted, and signed the Registers of Fellows and Associates respectively—namely, Frederick Montague Gratton and David Jenkins, *Fellows*; and Lister Coates and Henry Walter Coussens, *Associates*.

The President, having invited the serious attention of the Meeting while he made a communication from the Council respecting the lamentable event which occurred on the 24th inst. at Lyon whereby the life of the President of the French Republic had been sacrificed, formally moved a vote of condolence with the architects of France; and Mr. Charles Barry, *Past President*, having seconded the motion in sympathetic terms, it was

> RESOLVED, that the Royal Institute of British Architects desires to be associated with the Central Society of French Architects in an expression of the horror and indignation with which the news of President Carnot's mournful death has been received; and to offer, on behalf of British architects at home and beyond the seas, respectful and sympathetic condolence with their colleagues of France in the terrible calamity of last night.

The President, having delivered his Address on the Presentation of the Royal Gold Medal, the gift of Her Majesty the Queen, handed the same to Sir Frederic Leighton, P.R.A. [*H.A.*], who replied in acknowledgment of the honour, and the proceedings terminated at 9.15 p.m.

The Birmingham Society.

The following officers were elected, at the meeting of this Society on the 22nd inst., for the Session 1894–95: President, Mr. Wm. Henman [*A.*]; Vice-President, Mr. W. H. Bidlake, M.A. [*A.*]; Members of the Council, Messrs. Jethro A. Cossins, Wm. Hale [*F.*], H. R. Lloyd [*A.*], F. Barry Peacock, A. Hale, E. Hale, E. C. Bewlay; Librarian, Mr. C. Silk; Hon. Treasurer, Mr. A. Harrison; Hon. Solicitor, Mr. A. R. Lynex; Hon. Secretaries, Messrs. Charles E. Bateman and Herbert T. Buckland.

The Devon & Exeter Society.

In the list of officers of this Society printed on page 546 the name of Mr. Edward Appleton [*F.*] should have appeared among the members of the Council.

LEGAL.

Party-Walls.

JOLLIFFE *v.* WOODHOUSE.

This case, which came before the Court of Appeal on the 22nd inst., raised a question of considerable importance as to the law relating to party-walls. According to the report in *The Times* of the 23rd inst., the plaintiff was tenant from year to year of No. 17 Coronet Street, Hoxton, where he carried on business as a fish salesman. The defendant was the owner of the adjoining house, No. 19. Towards the end of 1891, or the beginning of 1892, the defendant pulled down his house with the intention of rebuilding it, and it was found that the party-wall between Nos. 17 and 19 was not strong enough to support the new building. The defendant accordingly served notice upon the plaintiff under the Metropolitan Building Act 1855 of his intention to pull down the party-wall. The defendant began to pull down the wall on 16th February 1892. Thereupon the plaintiff, on 17th February, issued the writ in this action for an injunction to restrain the defendant, his architect, builders, surveyors, or servants, from interfering with the party-wall, or in any way hindering the plaintiff from carrying on his business or rendering his house uninhabitable. The rebuilding was completed in August 1892. The trial of the action was commenced before Mr. Justice Bruce in April 1893, the defence being that the acts complained of were done under the powers of the Metropolitan Building Act 1855. The plaintiff then sought to make out that the defendant had exceeded his powers under the statute, and an order was made by consent directing the action to stand over to enable the plaintiff to give full particulars of alleged acts of excess of statute. The plaintiff duly delivered particulars under this order, from which it appeared that the main complaint was that the defendant had allowed an unreasonable time to elapse before the completion of the rebuilding. In May 1894 the action was tried before Mr. Justice Grantham and a common jury, and leave was obtained by the plaintiff to amend his statement of claim so as to raise the issue of delay in the rebuilding. The jury found a verdict for the plaintiff, damages £40, and judgment was entered accordingly. The defendant now applied for a new trial on the ground of misdirection. The points which he mainly relied on were two. First, that the Judge ought not to have allowed the claim to be amended, inasmuch as the cause of action had arisen since the writ; and, secondly, that as the defendant had provided a competent architect and builder he was not responsible to the plaintiff for the delay caused by their negligence.

Mr. A. T. Lawrance and Mr. St. L. Leslie for the defendant; Mr. Crispe and Mr. Swanton, for the plaintiff.

Counsel for the plaintiff were not called on.

Lord Justice Lindley said it was contended that the Judge had no power to amend so as to give to the plaintiff in this action any relief in respect of injuries sustained after the issue of the writ. But that point was clearly waived by the defendant by the consent order, and even apart from that order his Lordship was not satisfied that the Judge had no power to allow the amendment under the circumstances. Then it was said that the defendant was not liable for the injury caused by the delay in rebuilding, because he had employed a proper architect and a proper builder, and that they were responsible for the negligence, if any, which gave rise to the delay. That contention was founded on a mistake. A person who sought to knock down a party-wall for the purpose of rebuilding it had a right to do so both at common law and by statute, but it was his duty to rebuild it with reasonable despatch. Here the plaintiff had a cause of action against the defendant for the breach of that duty, and it was no answer to say that the defendant had delegated that duty to his builder or architect. A man could not delegate a duty, and the class of cases in which an employer who had engaged a competent contractor was held not liable for the negligence of the contractor had no application. The defendant might employ a contractor if he chose, but that did not enable him to get rid of the responsibility for the breach of the duty which he owed to the plaintiff. That clearly appeared from *Bower* v. *Peate* (L.R. 1 Q.B.D. 321) and

Hughes v. *Percival* (8 App. Cas. 443). The application should be refused.

Lord Justice Lopes concurred. *Cubitt* v. *Porter* (2 Man. & Ry., 267) decided that an action would not lie against an adjoining owner for pulling down a party-wall for the purpose of rebuilding it, but he was bound to do so without causing any unnecessary inconvenience to his neighbour, and without unreasonable delay. That also appeared from section 85, sub-section 3, of the Metropolitan Building Act 1855, which provided that no building owner should exercise any right thereby given "in such "manner or at such time as to cause unnecessary incon-"venience to the adjoining owner." An absolute duty was thrown upon the person knocking down the wall to do so within a reasonable time and in a reasonable manner, and he could not delegate that duty to a contractor.

Lord Justice Davey concurred.

General Building Line.

WENDON *v.* THE LONDON COUNTY COUNCIL.

The judgment of the Court of Appeal (2nd March) upholding the decision of the Queen's Bench Division in the case of *Wendon* v. *The London County Council* was briefly adverted to on p. 363 of the JOURNAL. Its great importance to building owners and others fully justifies the detailed report which follows.

From the case stated by the Metropolitan Police Magistrate it appears that previously to March 1890 the owner of a piece of land situate in Fulham, bounded on the west by Munster Road, and on the east by Filmer Road, laid out upon the land a road for building as a new street, forty feet in width, called Fernhurst Road, and communicating in a straight line directly between Munster Road and Filmer Road. In March 1890 the owner deposited with the Vestry of Fulham plans for the erection of twelve shops upon the land fronting Munster Road, and immediately to the north of Fernhurst Road. At that time there were no buildings erected on the land in or fronting the Munster Road, or in or fronting the Fernhurst Road. The site of the southernmost of the shops was on the north side of Fernhurst Road, and immediately at the junction of that road with Munster Road, and such site was the same as that of the building complained of in the summons. In August 1890 the owner commenced to build upon the site in accordance with the plans, and constructed immediately between the site and Fernhurst Road the footings for the front and flank external walls respectively of the southernmost shop, and erected upon the footings, and immediately adjoining and abutting upon Fernhurst Road, the flank wall of the shop to a distance of thirty feet from Munster Road, and to a height of twelve feet from the level of Fernhurst Road. He then discontinued the building operations, and portions of the work soon became covered with rubbish. Subsequently, in 1892, he erected upon the north side of Fernhurst Road a number of dwelling-houses, the fronts of which were erected at a distance of thirty feet from the centre of the roadway, and about ten feet back from the front of the wall mentioned above. In July 1892 the owner of the land granted a building lease of the said site to the appellant, who purchased the footings and flank wall, and who, in January 1893, commenced building operations, utilising for that purpose the portions of the work which had been erected by the owner. At the date of the summons the shop had been carried to the height of two storeys, or about twenty-three or twenty-four feet from the level of the ground, and it projected about ten feet in advance of the general line of building presently to be mentioned. No portion of the work was erected in advance of the flank wall, or further in advance of the general line of buildings than the flank wall. At the date of the summons the footings and flank wall formed part of the building complained of in the summons. The consent in writing of the London County Council had not been obtained to the completion of the building by the appellant, and on the 21st March 1893 the superintending architect of the Council decided the general line of building on the north side of Fernhurst Road to be the main fronts of the dwelling-houses erected thereon as above stated. The magistrate ordered the appellant to demolish so much of the building as was erected by him beyond the general line of buildings in Fernhurst Road. Upon appeal, the Divisional Court affirmed the order of the magistrate (see report, p. 128, *ante*). The building owner appealed.

Mr. Channell, Q.C., and Mr. R. Cunningham Glen, for the appellant Wendon; and Mr. Avory for the respondents, the London County Council.

The Master of the Rolls, Lord Esher, in delivering judgment, stated the question to be whether what was erected after the general line of buildings in the street was defined was a "building, structure, or erection" within the meaning of section 75 of the Metropolis Local Management Act 1862. That depended upon what was the true interpretation of that section. It was admitted that the case did not come within section 74. The state of things before the general line was defined was this: Part of a wall had been built to a height of 12 feet by the appellant's predecessor in title. That, in Lord Esher's opinion, must be taken to be the same as if the appellant had himself built it. The wall was intended to be the beginning of a shop or house. The building of the wall was discontinued for two years and a half; but inasmuch as there was no abandonment the case must be treated as if what was done before and after the building line was established had been done continuously. Then, was what was done after the general line was established erecting of a "building, structure, or erection" within the meaning of section 75? . . . The answer must depend in a great measure upon the facts, and the true inference to be drawn from them. The wall was built to a height of 12 feet before the general line was established, and it was intended to form part of a building; but the question was whether the wall was, as a fact, sufficiently advanced to be a "building, "structure, or erection" within the section. The section did not prevent a building existing at the time when the general line was established from being finished or completed afterwards. The words are: "No building shall be "erected," and the interpretation put upon them by the Court in *Auckland* v. *Westminster Local Board* (41 L. J. Ch. 723) was that in order to bring a case within the section the ground must be vacant at the time when the building line was established. If what had been erected at that time was not a "building, structure, or erection," it could not be said that the builder was afterwards completing or altering a "building, struc-"ture, or erection" which existed at the time when the building line was established. If, therefore, the Court thought that at that time this was not a "building, "structure, or erection," what was done afterwards was erecting a building after the building line had been ascertained, and not merely completing a building. What in any particular case amounted to a "building, structure, or "erection" was a question of fact. Then, did the wall amount to a building? The intention with which it was erected had little to do with the question. The question was, What was it? not what it was intended to be. The wall, his Lordship thought, was not so far advanced as to be a "building, structure, or erection" within the meaning of the section. There was nothing in the statute which said that where a building had been commenced before the building line was ascertained it might not be completed afterwards; but this wall, as a fact, was not a "building" within the section at the time the general line was established, and the land at that time was therefore vacant land within the true meaning of the section. If so, what was done afterwards was erecting a building, and the order of the magistrate was right. The appeal was dismissed.

Lord Justice Lopes and Lord Justice Davey followed with judgments to the same effect.